KLEINFELDER

May 26, 1988

Project 50-1014-03

Mr. Hank Yacoub California Regional Water Quality Control Board Los Angeles Region 107 South Broadway, Room 4027 Los Angeles, California 90012-4596

QUARTERLY SAMPLING REPORT FEBRUARY 1988 SOUTHERN CALIFORNIA CHEMICAL COMPANY 8851 Dice Road, Santa Fe Springs, California

Dear Mr. Yacoub:

Attached to this letter is our quarterly sampling report of the Southern California Chemical Company, Inc., Santa Fe Springs facility. The report includes the results of analyses of water samples and water level measurements obtained on February 2, 3, and 4, 1988, from the onsite monitoring wells. The February 1988 chemical data indicated that there was a discrepancy between the historic background concentrations and current concentrations of total chromium. As a result, all on-site wells were resampled on May 3, 4, and 5, 1988 and analyzed for total chromium. The results from this resampling and a discussion of the reason for the discrepancy is included in this report. This report also contains sampling protocols used during sampling and analysis.

We trust the information in the report meets your needs at this time. Should you have any questions, please feel free to contact us at your convenience.

Very truly yours,

Kleinfelder

Kenneth L. Durand

Project Hydrogeologist

John F. Ficke, P.E. Engineering Manager

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QUARTERLY SAMPLING REPORT SOUTHERN CALIFORNIA CHEMICAL COMPANY SANTA FE SPRINGS, CALIFORNIA

PROJECT 50-1014-03

PREPARED FOR

SOUTHERN CALIFORNIA CHEMICAL COMPANY 8851 DICE ROAD SANTA FE SPRINGS, CALIFORNIA

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1 INTRODUCTION

Included in this report is a summary of laboratory analyses of water samples and water level measurements obtained during February 2, 3, and 4, 1988 from the groundwater monitoring wells at the Southern California Chemical Company facility. Plate 1 shows the site in relation to the surrounding area. Included for comparison are the results of our previous water samplings.

Groundwater sampling at the subject site began in February 1985 to assess and aid in mitigation of a chromium and cadmium plume located in the vicinity of monitoring well MW-4 (see Plate 2). Subsequently, a quarterly groundwater sampling program was started in March of 1986. The purpose of the quarterly sampling program is to monitor and establish a data base for monitoring the compounds in the groundwater beneath the site. The most important aspects of this program are: (a) assessment of location and concentrations of the chromium and cadmium plume; (b) detection and evaluation of water-quality changes; and (c) characterization of background water quality.

This report includes the data obtained from the February 1988 sampling, which is the eighth quarterly sampling period for the site, as well as all previous sampling data. The original laboratory reports and chain-of-custody records of the February 1988 sampling run are included in the appendices. The ninth quarterly sampling is scheduled for June 1988, to be followed by a report to the Regional Water Quality Control Board by July 1988.



2 MONITORING WELL SAMPLING

- Sampling was performed by a Kleinfelder environmental technician using the Kleinfelder groundwater sampling vehicle.
- All wells are measured for static water level prior to sampling. The wells were purged and sampled by using an air-activated submersible pump (bladder pump). To minimize the potential for cross-contamination, the pump and sample lines were thoroughly decontaminated before sampling and between wells, as described in Appendix A.
- Twelve monitoring wells were sampled as part of this program. Eleven of the twelve wells sample groundwater from the uppermost portion of the first aquifer beneath the site. Well MW-4A is perforated in the lowest portion of the same aquifer.
- As customary, the Regional Water Quality Control Board was notified prior to sampling and was provided the opportunity to observe sampling and to collect duplicate or split samples.

3 LABORATORY TESTING

- Analytical testing was performed by Chemical Research Laboratories of Garden Grove, California. Quality assurance testing was provided by Brown and Caldwell Laboratories of Pasadena, California.
- Laboratory testing for the February 1988 quarterly sampling consisted of analyzing of about 322 water samples. The primary laboratory, Chemical Research Laboratories, analyzed 300 monitoring well samples, 10 quality control samples, and 2 spiked samples. The quality assurance laboratory, Brown and Caldwell Laboratories analyzed 8 split monitoring well samples, and 2 spiked samples. Spike samples were provided by Analytical Technologies, Inc. of San Diego, California.
- The results of the testing are summarized in Tables 1 through 12. Individual test results are included in Appendix B and chain-of-custody records are included in Appendix C.

4 QUALITY CONTROL

To monitor the validity of the chemical data, the following quality assurance measures were employed.

4.1 DUPLICATE SAMPLES

Duplicate samples were taken at each sampling site. This ensures that if breakage or trouble with the testing equipment occurs, there is a backup sample for testing. This also allows for a recheck on results if there is an inconsistency or if confirmation of results becomes necessary.

4.2 SPLIT SAMPLE TESTING

Split samples were collected and analyzed on four of the twelve monitoring wells. Monitoring wells MW-3, MW-4, MW-10, and MW-11 were analyzed by both laboratories. Table 13 summarized the comparison of the split samples. Samples were also provided to the Department of Health Services, Southern California Laboratory. The results from their analyses are also presented in Table 13.

4.3 CROSS-CONTAMINATION TESTING

Quality control (QC) samples were collected to verify that cross-contamination between wells was not occurring during sampling. Samples were collected prior to sampling of the first well and again between selected subsequent wells by the protocol described in Appendix A. The sequence of sampling and the compounds detected in the quality control samples are given in Table 14. The compounds with elevated concentrations in the monitoring wells (ethyl benzene, trichloroethylene, 1,1-dichloroethane, etc.) were non-detected at 1.0 μ g/l in the quality control samples. This indicates that the monitoring well sample cross contamination did not occur by the sampling system.

4.4 SPIKED SAMPLE TESTING

Analytical Technologies, Inc. of San Diego, California supplied a set of spiked samplles. Samples were spiked with toluene at 88 μ g/l, trichloroethylene at 70 μ g/l, and ethyl benzene at 81 μ g/l. Table 15 gives the percent recovery by each laboratory for these compounds. Percent recovery from the calculated concentration ranged from 57 to 100 percent, which indicates an acceptable degree of accuracy.

4.5 SAMPLE CONTROL

All samples were labeled during sampling and shipped refrigerated to the laboratories. A chain-of-custody form was maintained for all samples taken. Copies of these forms are included in Appendix C.



5 GROUNDWATER LEVELS

Depth to groundwater was measured prior to sampling of each monitoring well. The February 1988 measurements and all prior measurements are listed in Table 16. With the exception of monitoring well MW-4A, the groundwater surface rose in elevation beneath the facility from the previous quarter. Water level rise ranged from 0.07 feet to 1.28 feet. The groundwater surface elevation in monitoring well MW-4A declined by 0.45 feet from the previous quarter. Plate 3, "Groundwater Contour Map", illustrates the direction of groundwater flow beneath the study site.

6 GROUNDWATER QUALITY

6.1 EPA INDICATOR PARAMETERS

40 CFR 265.92(b)3 requires that the pH, specific conductance, total organic carbon (TOC), and total organic halogen (TOX) be analyzed as indicators of groundwater quality. These indicator measurements have remained relatively consistent with previous concentrations. The exception is the total organic carbon in monitoring well MW-3. Concentration of TOC in MW-3 increased from 50 mg/l to 135 mg/l, which corresponded to an increase in the organic compounds in this well.

6.2 ORGANIC COMPOUNDS

Organic chemicals have not been used on-site by Southern California Chemical Company during production processes. However, a number of organic compounds exist in the groundwater beneath the site. A large increase in the organic concentration in monitoring well MW-3 occurred since the previous sampling. Ethyl benzene increased from 290 μ g/l to 8500 μ g/l, toluene increased from non-detected at 0.5 μ g/l to 8,500 μ g/l, and total xylene increased from non-detected at 0.5 μ g/l to 23,000 μ g/l. The ethyl benzene, toluene, and total xylenes concentrations are shown on Plates 4, 5, and 6 respectively. It should be noted that monitoring well MW-3 is an upgradient well located along the northern property boundary of the site. As these data indicate, and as discussed in previous report, the suspected source for the organic chemicals is the neighboring facility.

6.3 SITE SPECIFIC INDICATOR CHEMICALS

Hexavalent chromium exists at elevated concentrations in monitoring well MW-4. Chromium concentrations were originally detected in MW-4 at 500 mg/l in February 1985. Subsequent concentrations have fluctuated between 61 mg/l and 550 mg/l. As of February 1988 hexavalent chromium existed at 140 mg/l in MW-4. Elevated concentrations of hexavalent chromium also exist in MW-9. Hexavalent chromium was first detected in MW-9 at 0.12 mg/l in June 1987 and has increased to 1.3 mg/l in February 1988. Hexavalent chromium was below the detection limit of 0.1 mg/l in the remaining on-site wells.

Historically, total chromium concentrations, except for monitoring wells MW-4 and MW-9, were below the detection limit of 0.04 mg/l. During the February 1988 sampling period, total chromium was detected at concentrations between 0.10 and 0.02 mg/l in the remaining on-site wells.

The reason for the increase in total chromium concentrations is most likely due to a change in the sample preparation method and not a change in the groundwater quality. EPA Method 3010, which is described in EPA document SW 846 is the methodology used to prepare water samples to be analyzed for total metals. Method 3010 requires that the sample be "well mixed" prior to removal of the sample from the collection bottle. This mixing of the sample suspends the fine sediments that were collected during sampling.

Brown and Caldwell, the previous primary laboratory, was using a modification of EPA Method 3010 for sample preparation in which the sample was not mixed prior to analysis. This modification of Method 3010 was suggested as the "common sense" approach by personnel of the Department of Health Services, Southern California Laboratory.

Chemical Research Laboratory, the current primary laboratory, used method 3010 exactly as stated in SW 846 document. Hence, mixing of the sample yielded total chromium concentrations which include the suspended sediments.

In summary, the changes found in total chromium were suspected to be most likely related to a change in sample preparation method and not a change in groundwater quality. To evaluate if this was the case, the monitoring wells were resampled for chromium in early May 1988. Samples were collected by the same protocol as in previous samples. The only difference was that these samples were field filtered through a 0.45 micrometer filter prior to placement into the sample container.

The results from the resampling and the February 1988 sampling are listed below.

Total Chromium February 1988	Total Chromium May 1988
0.08 mg/l	ND .02 mg/l
0.05 mg/l	ND.02 mg/l
	ND.02 mg/l
140. mg/l	238. mg/l
0.03 mg/l	0.02 mg/l
0.10	ND.02 mg/l
0.02	ND.02 mg/l
0.02 mg/l	ND.02 mg/l
	ND .02 mg/l
	2.42 mg/l
0.08 mg/l	0.05 mg/l
0.04 mg/l	ND .02 mg/l
	0.08 mg/l 0.05 mg/l 0.08 mg/l 140. mg/l 140. mg/l 0.03 mg/l 0.10 0.02 0.02 mg/l 0.03 mg/l 1.30 mg/l 0.08 mg/l

The data confirm our previous suspicion that the "background" concentrations of chromium detected during the February 1988 sampling were related to the change in sample preparation methods and not a change in water quality.

7 LIMITATIONS

This report is based on:

1. The observations of our field personnel

2. The results of laboratory tests performed by Brown & Caldwell Laboratory and Chemical Research Laboratories

3 Measurements of groundwater elevations in the 12 monitoring wells

4. Referenced documents

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation. Also, changes in the groundwater conditions could occur at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors. The services performed by Kleinfelder have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the Los Angeles County area. No other warranty, expressed or implied, is made.

Respectfully submitted,

Kleinfelder

Kenneth L. Durand

Project Hydrogeologist

met C Duran

John F. Ficke, P.E. Engineering Manager

KLD:JFF:vgj

TABLE 1

WATER QUALITY DATA

MONITORING WELL #1

DATE SAMPLED

	,			DATE	SARPLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND			.P.A. Indicator	Measurement	(CFR 40 265.92)							
pH (Units)	7.3		7.1		7.2	7.0	7.38	6.8	7.0	6.9	7.1	
TDC (mg/1)	3.7		19		35	21	ND 3	ND 3	13	32	10	
TOX (mg/l)	ND .05	i	80. DM		ND .08	ND .08	80. dM	80. DM	ND .08	ND .08	0.1	
SP. COND. (umhos/cm)	2300		3400		1650	3600	3200	2800	3400	3800	2975	
•			Site Specific	r Indirator ('homirals							
	***************************************		••••••••••••••••••••••••••••••••••••••									
CHROMIUM (TOTAL) (ag/1)	ND .00		ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04	0.08	NI
CHRONIUM (HEX) (mg/l)	ND .05		ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .1	
CADMIUM (mg/1)	ND .00		ND .009		ND .02	ND .01	ND .01	ND .01	ND .01	ND .02	ND .02	
COPPER (mg/1)	ND .OE		ND .02		ND .01	ND .04	ND .04	ND .02	0.10	ND .02	0.04	
ZINC (mg/l)	ND .01	19	0.18		0.04	ND .OB	0.018	ND .03	0.06	ND .03	0.04	
CHLORIDE (mg/1)	330		300		650	920	700	570	720	770	430	
NITRATE as N (mg/l)	7.0		3.7		0.5	1.3	4.06	5.3	ND .1	2.3	4.5	
MITRATE as NO3 (mg/l)	31		17		18	11	18	23	ND .4	11	19	
NOTE: ND 1 = Chemical was	not detected at	1 mg/l.										
			Organic Comp	ounds (E.P.A.	Method 624)		************					
1,1-DICHLORDETHANE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
l,1-DICHLORDETHYLENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
1,2-DICHLOROETHANE (ug/l)			ND 1		ND 1	2	. 1	0.5	. 1	1	ND 1	
BENZENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
CHLOROFORM (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
ETHYL BENZENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
TRICHLORGETHYLENE (ug/1)			16		16	18	18	9	11	2.4	4	
TOLUENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
XYLENE (ug/1)			ND 1		ND 1	ND 1		· ND .5	ND .5	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND 2	ND .5	1.7	ND 1	

TABLE 2

NATER QUALITY DATA

MONITORING WELL #2

ואח	16	CV	MD1	FD

	I			DATE	SAMPLED				4			
	2/85 - 3/85		3/86	5/86	7/86	9/86	12/86		6/87 - 7/87	10/87	2/88	5/88
COMPOUND	;				(CFR 40 265.92)							
pH (Units)	7.0		7.4		7.7	7.4	7.68	7.1	7.1	7.12	7.27	
TOC (mg/1)	34		4.8		ND 3	ND 3	ND 3	NÐ 3	ND 3	ND 3	ND 1	
TOX (mg/1)	ND .05		ND .OB		80. GM	80. UM	ND .08	80. UM	ND .08	80. UM	0.04	
SP. COND. (unhos/cm)	2300		1900		1800	2100	2280	1900	3400	1500	1550	
			Site Specifi	ic Indicator (Chemicals							
CHROMIUM (TOTAL) (mg/l)	00. GN	05 ND .033	ND .03		.03 dw	ND .03	ND .03	ND .04	ND .04	ND .04	0.05	ND .
CHROMIUM (HEX) (mg/l)	ND .05		ND .03		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .1	
CADMIUM (mg/1)	ND .00		ND .005		ND .01	ND .03	ND .01	ND .01	ND .01	ND .02	ND .02	
COPPER (eg/1)	ND .08		ND .02		ND .02	ND .04	ND .04	ND .02	ND .02	ND .02	0.04	
ZINC (mg/1)	ND .01	9	ND .03		ND .04	ND .08	0.021	ND .031	ND .031	ND .03	0.03	
CHLORIDE (eq/1)	270		180		220	410	510	250	700	180	110	
NITRATE as N (mg/1)	2.1		5.8		5.4	5.0	6.25	7.2	8.8	7.2	7.2	
NITRATE as NO3 (mg/1)	7.1		26		24	22	27.7	32	39	32	32	
NOTE: ND 1 = Chemical was	not detected at	1 ag/1.										
			Organic Comp	pounds (E.P.A.	. Method 624)							
1,1-DICHLOROETHANE (ug/l)		4	3		ND 1	5	9	21	20	2.5	ND 1	
1,1-DICHLOROETHYLENE (ug/l)		3	ND 1		ND 1	3	5	0.9	11	0.94	ND 1	
1,2-DICHLOROETHANE (ug/1)		ND 1	NG 1		3	1	ND 1	ND .5	2.2	ND .5	ND 1	
BENZEWE (ug/1)		ND 1	ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1))	ND 1	ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
CHLOROFORM (ug/1)		ND 1	ND 1		ND 1	2	2	1	ND .5	0.73	ND 1	
ETHYL BENZENE (ug/1)		NĐ 1	NĐ 1		2	2	ND 1	ND .5	6.2	ND .5	ND 1	
TRICHLORDETHYLENE (ug/1)		21	22		12	38	67	20	93	40	5	
TOLUENE (ug/1)		ND 1	ND 1		3	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
XYLENE (ug/1)		ND 1	ND 1		2	NÐ 1		ND .5	ND .5	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)		ND 1	ND 1		ND 1	NĐ 1	ND 1	ND 2	ND .5	11	ND 1	

TABLE 3

WATER QUALITY DATA

MONITORING WELL #3

DATE SAMPLED

	I			DAIE :	SAMPLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86		/87 - 7/87	10/87	2/88	5/88
COMPOUND				r Measurement ((
pH (Units)	7.4		7.0		7.2	7.2	7.55	6.9	7.0	5.9	6.78	
OC (mg/l)	16		190		44	29	31	20.5	21	50	135	
TOX (mg/1)	0.17	•	80. GM		.18	.17	.21	.22	.15	.27	.10	
SP. COND. (umhos/cm)	1700		1500		2200	2200	2400	2300	2200	3300	1575	
`			Site Specifi	ic Indicator Ch	emicals							
CHROMIUM (TOTAL) (mg/l)	ND .00	05 ND .033	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04	.08	ND .0
CHROMIUM (HEX) (mg/1)	ND .05	ND .033	ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .1	
CADMIUM (mg/l)	MD .00	002 ND .011			ND .01	ND .01	ND .01	ND .01	ND .01	ND .02	ND .02	
COPPER (mg/l)	ND .08	}	ND .02		ND .02	ND .04	ND .04	ND .02	0.02	ND .02	ND .02	
ZINC (mg/l)	ND .01	.9	0.26		ND .04	ND .08	0.021	ND .031	ND .031	ND .03	ND .02	
CHLORIDE (mg/l)	170		76		400	520	550	420	380	740	190	
NITRATE as N (mg/l)	3.0		ND 1		6.5	4.1	4.81	3.4	3.8	5.2	ND .2	
NITRATE as NO3 (mg/1)	13		NE 4.4		-29	18	21.3	15	17 '	23	ND 1	
NOTE: ND 1 = Chemical was s	not detected at	1 mg/l.										
			Organic Com	pounds (E.P.A.	Method 624)							
1,1-DICHLOROETHANE (ug/1)		6	ND 50	5	4	5	5	4	1.6	6.9	ND 10	
1,1-DICHLOROETHYLENE (ug/1)		14	ND 50	11	7	13	17	7.8	3.9	15	ND 10	
1,2-DICHLOROETHANE (ug/1)		ND 1	ND 50	9	6	7	11	18	2.1 1	ND .5	36	
BENZENE (ug/1)		9	ND 50	2	ND 1	3	2	ND .5	ND .5 1	ND .5	ND 10	
CARBON TETRACHLORIDE (ug/1)		73	ND 50	78	110	58	87	50	73	87	ND 10	
CHLORDFORM (ug/1)		46	ND 50	36	97	33	45	20	22 1	ND .5	ND 10	
ETHYL BENZENE (ug/1)		ND 1	95,000	1100	ND 1	310	4	ND .5	ND .5	290	8500	
TRICHLOROETHYLENE (ug/1)		320	ND 50	160	170	200	160	98	70	150	14	
TOLUENE (ug/1)		2	15,000	11	ND 1	ND 1	ND 1	ND .5	ND .5 1	ND .5	8500	
XYLENE (ug/1)		ND 1	20,000	2000	ND 1	10		ND .5	ND .5 1	ND .5	23000	
METHYLENE CHLORIDE (ug/1)		ND 1	ND 50	ND 1	ND 1	2	ND 1	ND 2	ND 2	9.6	ND 10	

TABLE 4
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA .

MONITORING WELL #4

DATE SAMPLED

				Unit (
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND				Measurement (
oH (Units)	6.3		7.1		7.1	6.6	7.4	6.7	6.3	6.3	6.6	
OC (mg/1)	36		26		110	79	98	26.5	133	90	46	
OX (mg/1) -	ND .05	i	.26		.19	2.3	1.40	.68	2.10	1.3	.36	
P. COND. (umhos/cm)	6400		3600		3500	4250	4950 	4000	11,000	7300	4625	
			Site Specifi	ic Indicator Ch	emicals						•	
CHROMIUM (TOTAL) (mg/l)	500	550	61		120	180	170	98	440	190	140	2
HROKIUM (HEX) (mg/l)	500	500			120	180	170	100	430	232	140	
ADMIUM (mg/l)	0.78		0.03		0.04	0.09	0.07	0.05	ND .01	.33	.06	
OPPER (mg/l)	ND .08		ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02	ND .03	
INC (mg/1)	0.06	b	ND .03		ND .04	ND .08	ND .007	ND .03	ND .03	ND .03	ND .03	
CHLORIDE (mg/l)	2300		1100		770	1300	1400	960	3500	1800	790	
NITRATE as N (mg/l)	18	12	ND 13		0.5	1.3	1.1	ND .1	ND .7	1.3	.2	
NITRATE as NO3 (mg/l)	81	55 	ND 55		2.4	5.6	5.0	ND .4	ND 3	5.8	1.1	
NOTE: ND 1 = Chemical was :	not detected at	1 mg/l.										
			Organic Comp	oounds (E.P.A. 1	lethod 624)							
,1-DICHLOROETHANE (ug/1)		100	100	42	57	61	120	27	110	120	70	
,1-DICHLOROETHYLENE (ug/1)		100	42	34	41	61	67	20	94	110	56	
,2-DICHLORDETHANE (ug/1)		ND 50	17	34	61	12	140	74	74	100	35	
ENZENE (ug/1)		ND 50	. 16	9	ND 1	ND 10	5	ND 5	ND 5	ND .5	ND 14	
ARBON TETRACHLORIDE (ug/1)		ND 50	ND 1	ND 1	ND 1	ND 10	ND 1	ND 5	ND 5	1.5	ND 20	
CHLORDFORM (ug/1)		ND 50	7	3	8	10	12	6.2	30	23	ND 20	
THYL BENZENE (ug/I)		3000	36	50	1100	670	220	160	1500	380	70	
TRICHLORDETHYLENE (ug/1)		550	140	170	200	280	290	180	280	190	110	
TOLUENE (ug/1)		8300	130	25	330	260	220	240	3700	580	180	
XYLENE (ug/1)		10,000	100	30	300	200	300	731	2700	570	200	
METHYLENE CHLORIDE (ug/1)		100	12	ND 1	17	ND 10	ND 1	27	140	110	ND 20	

TABLE 5
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #4A

ATE SAMPLED

				DAIE	SAMPLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND	;				(CFR 40 265.92)							
pH (Units)		6.8	7.5		7.6	7.5	7.7		7.7	7.2	7.3	
TOC (mg/l)		40	8.3		ND 3	ND 3	ND 3		ND 3	. ND 3	ND 1	
TOX (mg/l)		ND .05	ND .OB		ND .08	ND .OB	ND .OB		.14	ND .03	ND .01	
SP. COND. (uehos/cm)		1500	1500		850	1400	1525		1600	1700	1662	
,												
			Site Specific	Indicator C	hemicals							
CHROKIUM (TOTAL) (mg/l)		ND .03	ND .03		ND .03	ND .03	ND .03		ND .04	ND .04	.03	
CHRONIUM (HEX) (mg/l)		ND .5			ND .02	ND .02	ND .02		ND .02	ND .02	ND .1	
CADMIUM (mg/l)		ND .01	ND .01		ND .01	10. DM	ND .01		ND .01	ND .02	ND .02	
COPPER (mg/1)			ND .02		ND .02	ND .04	ND .03		ND .02	ND .02	ND .02	
ZINC (mg/l)			ND .03		ND .04	80. DM	ND .007		ND .03	ND .03	ND .02	
CHLORIDE (mg/1)			100		110	120	130		160	129	97	
NITRATE as N (mg/l)		4.5	7.5		6.1	4.7	6.3		5.4	6.1	2.8	
NITRATE as NO3 (mg/l)		20	33		27	21	28		24	27	17	
NOTE: ND 1 = Chemical was	not detected at	1 a g/l.										
			Organic Compa	ounds (E.P.A.	Method 624)							
1,1-DICHLORDETHANE (ug/I)			13		11	3	19		140	1.2	ND 1	
1,1-DICHLORDETHYLENE (ug/l)			1		2	ND 1	2		50	ND .5	ND 1	
1,2-DICHLORDETHANE (ug/l)			ND 1		ND 1	ND 1	2		1.5	ND .5	ND 1	
BENZENE (ug/1)			8		ND 1	ND 1	ND 1		ND .5	MD .5	ND .7	
CARBON TETRACHLORIDE (ug/1)			ND 1		ND 1	ND 1	ND 1		ND .5	ND .5	ND 1	
CHLOROFORM (ug/1)			ND 1		ND 1	ND 1	2		17	ND .5	ND 1	
ETHYL BENZENE (ug/1)			ND 1		ND 1	ND 1	ND 1		ND .5	ND .5	ND 1	
TRICHLOROETHYLENE (ug/1)			В		7	3	12		82	3.2	ND 1	
TOLUENE (ug/I)			ND 1		ND 1	ND 1	NĐ 1		1.5	ND .5	ND 1	
XYLENE (ug/1)			ND 1		ND 1	ND 1	****		ND .5	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)			ND 1		ND 1	ND 1	ND 1		11	NÐ .5	ND 1	

TABLE 6

WATER BUALITY DATA

MONITORING WELL #5

DATE SAMPLED

				DATE	SAMPLED				*.			
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND			.P.A. Indicator								*************	
pH (Units)	7.3		7.4		7.3	7.3	7.82	6.9	7.0	7.6	7.06	
TBC (mg/1)	ND 3		4.B		5	3	ND 3	ND 3	ND 3	5	7	
TOX (mg/1)	.19		.16		.65	.18	.30	.45	.36	ND .03	.3	
SP. COND. (umhos/cm)	1700		1200		1400	1100	1220	1400	1400	1300	1537	
			Site Specifi	c Indicator i	Parameters				•			
CHROMIUM (TOTAL) (mg/l)	ND .00	05	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04	.1	, div
HRONIUM (HEX) (mg/1)	ND .05	i	ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .1	
ADMIUM (mg/l)	ND .00	02	ND .009		ND .01	ND .01	ND .01	ND .01	ND .01	ND .02	ND .02	
DPPER (mg/l)	MD .08	!	ND .02		ND .02	ND .04	ND .04	ND .02	ND .02	ND .02	ND .02	
INC (mg/1)	ND .01	9	0.18		ND .04	ND .OB	ND .001	ND .031	ND .03	ND .03	.4	
HLORIDE (æg/l)	2.0		66		79	290	143.5	110	110	100	90	
ITRATE as N (mg/l)	0.42	!	8.8		12	8.6	11.13	10	15	3.4	5	
ITRATE as NO3 (mg/1)	1.9		39		55	28	49.3	45 	65	24	22	
HOTE: ND 1 = Compound was r	not detected at	1 a g/1.										
			Organic Comp	ounds (E.P.A	Method 624)							
,1-DICHLOROETHANE (ug/l)		ND 1	ND 1		2 ·	2	7	4	5.4	.29	ND 1	
,1-D1CHLOROETHYLENE (ug/1)		ND 1	ND 1		3	3	4	2.7	5.2	.25	ND 1	
,2-DICHLOROETHANE (ug/1)		ND 1	ND 1		ND 1	ND 1	ND 1	5. מא	ND .5	ND .3	ND 1	
ENZENE (ug/1)		5	ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND .7	
ARBON TETRACHLORIDE (ug/1)		3	11		45.5	37	68	100	120	99	20	
HLDROFORM (ug/1)		2	10		14.5	16	43	48	50	95	10	
THYL BENZENE (ug/1)		NĐ 1	ND 1		ND 1	6	ND 1	ND .5	NÐ .5	ND .5	ND 1	
RICHLOROETHYLENE (ug/1)		10	24		64	36	70	70	59	26	5	
OLUENE (ug/1)		1	ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
(YLENE (ug/1)		ND 1	ND 1		ND 1	ND 1		ND .5	7.3	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)		ND 1	ND 1		ND 1	ND 1	ND 1	ND 2	ND .5	4.3	ND 1	

TABLE 7
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #68

DATE SAMPLED

				JA1E	SHULLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/67	6/87 - 7/87	10/87	2/88	5/88
COMPOUND	i		.P.A. Indicator		(CFR 40 265.92)							
pH (Units)	7.6		7.4		7.5	7.8	7.6	7.1	7.4	7.1	7.13	
TOC (mg/1)	ND 3		6.5		ND 3	ND 3	ND 3	ND 3	ND 3	9	ND 1	
TOX (mg/1)	0.1		ND .08		ND .OB	ND .OB	80. DN	ND .08		ND .03	.02	
SP. COND. (uaños/ca)	1400		1300		1400	1200	1425	1400	1600	1400	1265	
			Site Specifi	c Indicator C	hemical							
CHROMIUM (TOTAL) (mg/1)	0.00	70	ND .03		ND .03	ND .02	ND .03	ND .04	ND .04	ND .04	.02	
CHROMIUM (HEX) (mg/l)	ND .05		ND .02		ND .02	ND .02	ND .03	ND .02		ND .04	ND .1	ND
CADMIUM (mg/1)	ND .00		ND .009)	ND .01	ND .01	ND .02	ND .02		ND .02	ND .02	
COPPER (mg/1)	ND .08		ND .02		ND .02	ND .04	ND .03	ND .01		ND .02	ND .02	
ZINC (mg/I)	ND .03		ND .03		ND .04	ND .08	ND .007	ND .03		ND .03	ND .02	
CHLORIDE (mg/1)	79		220		82	100	140	92	130	94	61	
KITRATE as N (mg/I)	6.9		8.8		7.0	5.2	6.1	7	8.4	8.4	8.4	
NITRATE as NO3 (mg/l)	28		39		31	23	27	31	37	37	37	
NOTE: ND 1 = Chemical was	not detected at	1 •g/ì.									***************************************	
			Organic Comp	oounds (E.P.A.	Method 624)							
1,1-DICHLOROETHANE (ug/l)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
1,1-DICHLORGETHYLENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
1,2-DICKLOROETHANE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
BENZENE (ug/1)			ND 1		ND 1	ND 1	ND 1	MD .5	ND .5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
CHLOROFORM (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
ETHYL BENZENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	1.5	ND .5	ND 1	
TRICHLORGETHYLENE (ug/1)			30		19	23.5	24	21	. 20	33	22	
TOLUENE (ug/1)			ND 1		ND 1	ND 1	ND 1	ND .5	0.8	ND .5	ND 1	
IYLENE (ug/1)			ND 1		ND 1	ND 1	****	ND .5	7.9	ND .5	NG 1	
METHYLENE CHLORIDE (ug/1)			ND 1		NĐ 1	ND 1	ND 1	ND .5	2.6	1.2	ND 1	

TABLE B

WATER QUALITY DATA

MONITORING WELL #7

DATE SAMPLED

	1			DAIL	SMULLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/88	2/88	5/88
COMPOUND	;		A. Indicator									
pH (Units)		6.3	7.3		7.4	7.2	7.3	6.5	6.8	7.3	8.94	
TOC (mg/1)		260	6.5		5	17	ND 3	43	7	5	2	
TOX (ag/1)		0.081	ND .OB		80. DM	ND .08	80. GM	ND .08		FO. DM	.08	
SP. COND. (uehos/ce)		2700 	1700		1900	5600	5850	3700	3300	5000	8500	
			Site Specific	Indicator C	hemical							
CHROMIUM (TOTAL) (mg/l)		ND .03	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04	.02	ND .
CHROMIUM (HEX) (mg/1)		ND .5	ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .1	
CADMIUM (mg/1)		ND .01	ND .009		ND .01	ND .01	ND .01	NĐ .01	ND .01	ND .02	ND .02	
COPPER (mg/l)			ND .02		ND .02	ND .04	ND .03	ND .02	0.08	ND .02	ND .02	
ZINC (mg/l)			ND .03		ND .04	ND .04	0.022	ND .03	0.04	ND .03	ND .02	
CHLORIDE (mg/1)		280	190		280	1800	1700	630	610	1200	1900	
NITRATE as N (mg/l)		27	5.0		4.3	2.7	4.4	19	25	1.1	ND 0.2	
NITRATE as NO3 (mg/l)		120	22		19	12	19.5	82	110	19	ND 1	
NOTE: ND 1 = Chemical was	not detected at	1 mg/l.										
			Organic Coapo	unds (E.P.A.	Method 624)							
1,1-DICHLORDETHANE (ug/l)		2			8	42	30	7.1	14	6	ND 1	
1,1-DICHLORDETHYLENE (ug/l)	1	ND 1			2	5	6	4D 5	6	.55	ND 1	
1,2-DICHLORDETHANE (ug/1)		ND 1			ND 1	2	ND 1	ND 5	ND .5	ND .5	ND 1	
BENZENE (ug/1)		64			ND 1	ND 1	NĐ 1	ND 5	ND .5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1)		ND 1			ND 1	ND 1	ND 1	ND 5	ND .5	ND .5	ND 1	
CHLDROFORK (ug/1)		ND 1			ND 1	ND 1	ND 1	8.2	ND .5	ND .5	ND 1	
ETHYL BENZENE (ug/1)		ND 1			4	ND 1	ND 1	1.0	ND .5	ND .5	ND 1	
TRICHLOROETHYLENE (ug/1)		29			67	71	70	180	130	35	24	
TOLUENE (ug/1)		2			5	ND 1	ND 1	2.2	3.6	ND .5	ND 1	
XYLENE (ug/1)		ND 1			4	ND 1		ND 5	ND .5	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)		ND 1			ND 1	ND 1	ND 1	ND 5	ND .5	1.1	ND 1	

TABLE 9

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL 48

DATE SAMPLED

	1			JHIE	SMRFLED							
	2/85 - 3/85	7/85 ~ 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND	.;		P.A. Indicator	Measurement	(CFR 40 265.92)							
pH (Units)		6.6	7.5		7.4	7.4	7.4	6.9	7.1	7.1	7.23	
TOC (mg/l)		99	7		8	ND 3	ND 3	ND 3	5	ND 3	ND 1	
TOX (mg/l)		0.44	.09		ND .08	.10	.15	ND .08		ND .08	.04	
SP. COND. (unhos/cm)		2800	1500		1700	1600	1800	2000	2100	1300	1550	
			Site Specifi	c Indicator C	hemical							
0100011W /707AL \ //1\						NR A7	ND 07		NR AL			
CHROMIUM (TOTAL) (ag/1) CHROMIUM (HEX) (ag/1)		ND .05 ND .05	ND .03 ND .02		ND .03 ND .02	ND .03 ND .02	ND .03 ND .02	ND .04 ND .02		ND .04 ND .02	.03 ND .1	ND .02
CADMIUM (MEX) (mg/1)		ND .01	ND .02		ND .01	ND .02	ND .01	ND .02		ND .02	ND .02	
COPPER (sq/1)		NO .01	ND .02		ND .02	ND .04	ND .03	ND .02		ND .02	ND .02	
ZINC (mg/1)			ND .02		ND .02	ND .OB	ND .001	ND .02		ND .03	ND .02	
CHLORIDE (ag/1)			530		170	270	250	300	300	120	140	
NITRATE as N (mg/l)		1.3	4.2		3.2	2.7	3.2	2.5	2.2	4.3	4.5	
NITRATE as NO3 (mg/l)		5.8	39		14	12	14.1	11	10	19	20	
NOTE: ND 1 = Chemical was	not detected at	1 mg/1.										
			Organic Comp	ounds (E.P.A.	Method 624)							
1,1-DICHLOROETHANE (ug/l)			41		76	160	160	55	160	45	50	`
1,1-DICHLOROETHYLENE (ug/1))		3		8	17	19	5.6	29	5.5	2.6	
1,2-DICHLORDETHANE (ug/1)			1		14	14	8	9.5	16	ND .5	ND 1	
BENZENE (ug/1)			NĐ 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1))		NĐ 1		ND 1	ND 1	8	ND .5	ND .5	ND .5	ND 1	
CHLOROFORM (ug/1)			ND 1		2	2	2	5.6	ND .5	0.55	ND 1	
ETHYL BENZENE (ug/1)			ND 1		2	ND 1	ND 1	ND .5	ND .5	ND .5	ND 1	
TRICHLOROETHYLENE (ug/1)			19		28	52	44	67	51	25	17	
TOLUENE (ug/1)			ND 1		2	ND 1	ND 1	2.3	ND .5	ND .5	ND 1	
XYLENE (ug/1)			ND 1		1	ND 1		d. 3	ND .5	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)			5		ND 1	ND 1	NÐ 1	ND .5	2.4	3.0	ND 1	

TABLE 10

WATER QUALITY DATA

MONITORING WELL #9

				DATE	SAMPLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND		Ε.	P.A. Indicator	Measurement								
pX (Units)		6.4	7,4		7.3	7.0	7.4	6.9	6.8	6.9	7.15	
TOC (mg/1)		210	14		28	2.8	24	ND 3	42	15	. 3	
TOX (ag/1)		0.13	.26		.12	.28	.37	.37	.49	.28	.16	
SP. COND. (umhos/cm)		2200	2800		2000	2400	2675 	2500	3200	3100	2075	
-			Site Specifi	c Indicator C	hemical							
CHROMIUM (TOTAL) (mg/l)		ND .03	ND .03		ND .03	ND .03	ND .03	ND .04	0.12	.94	1.30	2.4
CHRONIUM (HEX) (mg/1)		ND .5	ND .02		ND .02	0.05	ND .02	ND .02	0.05	.59	1.30	
CADMIUM (mg/l)		ND .01	ND .00		ND .01	ND 1	ND .01	ND .01	ND .01	ND .02	ND .02	
COPPER (mg/1)			ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02	ND .02	
ZINC (mg/1)			ND .03		ND .04	ND .OB	0.018	ND .03	ND .03	ND .03	ND .02	
CHLORIDE (mg/1)		30 0	530		250	720	670	470	640	630	290	
NITRATE as N (mg/l)		1.4	8.8		3.2	1.4	3.72	4.1	2.9	8.4	7.2	
NITRATE as NO3 (mg/l)		6.3	39		14	6.2	16.5	18	13	37	32	
NOTE: ND 1 = Chemical was	not detected at	1 a g/1.							-			
			Organic Comp	ounds (E.P.A.	Method 624)							
1,1-DICHLOROETHANE (ug/l)			99		50	360	250	110	140	130	40	
1,1-DICHLOROETHYLENE (ug/1)			18		18	200	110	44	72	84	50	
1,2-DICHLOROETHANE (ug/l)			10		13	96	52	90	69	ND .5	, b	
BENZENE (ug/1)			ND 1		ND 1	ND 5	ND 1	ND .5	ND 2.5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1)			ND 1		ND 1	ND 5	ND 1	ND .5	ND 2.5	ND .5	ND 1	
CHLOROFORM (ug/1)			20		4 .	30	22	10	19 ND 2 5	28	13	
ETHYL BENZENE (ug/1)			ND 1		ND 1	ND 5	ND 1	ND .5	ND 2.5	ND .5	ND 1	
TRICHLOROETHYLENE (ug/1)			61 ND 4		3	550 ND 5	240 ND 1	150 0.7	160 ND 2 5	150 ND .5	17 ND 1	
TOLUENE (ug/1)			ND 1		ND 1	ND 5	ND 1	0.7 ND .5	ND 2.5	ND .5		
XYLENE (ug/1)			ND 1		ND 1 ND 1	ND 5	18	ND .5	ND 2.5 33	83 83	ND 1 35	
METHYLENE CHLORIDE (ug/1)			110		MA 1	כ עא	10	27	33	03	33	

TABLE 11

WATER QUALITY DATA

MONITORING WELL #10

				DATE	SAMPLED							
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/84	3/87	6/87 - 7/87	10/87	2/88	5/88
COMPOUND	E.P.A. Indicator Measurement (CFR 40 265.92)											
pH (Units)		6.8	7.8		7.6	7.4	7.8	7.4	7.2	7,1	7.51	
TOC (mg/1)		440	10		130	103	135	33.8	158	56	7	
TOX (ag/l)		0.17	80. DM		80. DM	.14	.15	.20	.62	.18	06	
SP. COND. (uahos/ca)		2100	1300		1600	1400	1550	1600	2100	1900	1355	
			Site Specific	: Indicator Ch	nemical							
CHROMIUM (TOTAL) (mg/l)		ND .03	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04	.08	
CHROMIUM (HEX) (mg/l)		ND .5			ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .1	
CADMIUM (mg/l)		ND .01			ND .01	ND .01	ND .01	ND .01	ND .01	ND .02	ND .02	
COPPER (mg/l)			ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02	ND .02	
ZINC (mg/l)			ND .03		ND .04	80. DK	ND .007	ND .03	ND .03	ND .03	ND .02	
CHLORIDE (mg/1)			150		120	150	160	160	260	230	100	
NITRATE as N (mg/l)		ND .1	ND .1		0.1	ND .01	ND .1	ND .1	ND .1	ND .1	ND .2	
NITRATE as NO3 (mg/l)		ND 4.4	ND 4.4		0.6	ND .04	ND .4	ND .4	ND .4	ND .4	ND 1	
NOTE: ND 1 = Chemical was	not detected at	1 mg/l.										
			Organic Comp	ounds (E.P.A.	Method 624)					~ ~~~~~		
1,1-DICHLOROETHANE (ug/l)		ND 50	2		6	ND 10	20	ND 5	23	21	3.7	
1,1-DICHLOROETHYLENE (ug/1))	ND 50	1		7	14	ND 20	ND 5	41	28	ND 1	
1,2-DICHLOROETHANE (ug/1)		ND 50	17		88	200	270	92	160	93	15	
BENZENE (ug/l)		ND 50	ND 1		ND 1	ND 10	ND 20	ND 5	ND 2.5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1))	ND 50	ND 1		ND 1	ND 10	ND 20	ND 5	ND 2.5	ND .5	ND 1	
CHLOROFORM (ug/1)		50	ND 1		ND 1	ND 10	ND 20	ND 5	3.1	2.3	ND 1	
ETHYL BENZENE (ug/1)		6500	68		ND 1	2200	1800	330	2000	290	ND 1	
TRICHLORDETHYLENE (ug/1)		250	29		56	93	120	62	160	130	14	
TOLUENE (ug/1)		17,000	ND 1		ND 1	36	560	ND 5	14	ND .5	ND 1	
XYLENE (ug/1)		20,000	ND 1		70	90	600	120	500	ND .5	ND 1	
METHYLENE CHLORIDE (ug/1)		100	ND 1		ND 1	ND 10	ND 20	ND 5	13	1.8	ND 1	

NOTE: ND 1 = Compound was not detected at 1 ug/l.

7

TABLE 12
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #11

DATE SAMPLED

				DAIL C	JANII EED							
	1 2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86 -	12/86	3/87	6/87 - 7/87	10/87	2/88	5/88
CÓMPOUND	1		P.A. Indicator									
pH (Units)		6.6	7.8		7.2	7.3	7.5	7.5	7.4	7.4	7.34	
TOE (mg/l)		54	13		120	156	125	26.8	58	61	12	
TOX (mg/1)		ND .05	0.1		80. JM	MD .08	.12	.14	.15	ND .08	.07	
SP. COND. (umhos/cm)		1600 	1600		1700	1600	1800	1700	2100	1600	1895	
			Site Specific	Indicator Ch	poical							
CHROMIUM (TOTAL) (mg/l)		ND .03	ND .03		ND .03	ND .03 ND .02	ND .03	ND .04 ND .02	ND .04 ND .02	ND .04 ND .02	.04	ND .
CHRONIUM (HEX) (mg/1)		ND .5 ND .01	ND .01		ND .02 ND .01	ND .02	ND .02	ND .02	ND .02	ND .02 ND .02	ND .1 ND .02	
CADMIUM (mg/l)		ND .01	ND .01		ND .01	ND .01	ND .01	ND .02	ND .02	ND .02	ND .02	
COPPER (mg/1) ZINC (mg/1)			ND .02		ND .04	ND .08	ND .001	ND .03	ND .03	ND .03	ND .02	
CHLORIDE (mg/1)		220	230		180	230	240	170	270	110	86	
MITRATE as N (ag/1)		1.2	2.5		1.1	ND 1	0.1	1.2	0.7	1.5	2.2	
NITRATE as MO3 (mg/l)		5.2	11		4.8	ND .4	0.5	5.5	3.3	6.8	9.6	
NOTE: ND 1 = Chemical was	not detected at	i a g/l.	,									
			Organic Compo	ounds (E.P.A.	Method 624)							
1,1-DICHLORDETHANE (ug/1)			10	4	10	ND 200	ND 100	6.9	12	2.3	2.5	
1,1-DICHLORDETHYLENE (ug/1))		8	2	5	ND 200	ND 100	5.0	11	2.6	2.3	
1,2-DICHLOROETHANE (ug/1)			8	31	17	ND 200	130	95	21	89	21	
BENZENE (ug/1)			ND 1	2	ND 1	ND 200	ND 100	1.5	ND .5	ND .5	ND .7	
CARBON TETRACHLORIDE (ug/1)		ND 1	ND 1	ND 1	ND 200	ND 100	ND .5	ND .5	ND .5	ND 1	
CHLOROFORM (ug/I)			3	3	10	ND 200	ND 100	3.3	3.5	1.0	ND 1	
ETHYL BENZENE (ug/1)			13	1800	2200	6400	3300	ND .5	1200	180	17	
TRICHLOROETHYLENE (ug/1)			110	36	76	ND 200	180	46	81	36	20	
TOLUENE (ug/1)			ND 1	5400	5200	14,000	7500	3.6	360	ND .5	ND 1	
TYLENE (ug/1)			20 ND 1	4000 ND 1	1500 ND 1	10,000 ND 200	3000 ND 100	220 1.8	370 8.4	ND .5 ND .5	ND 1 3	
METHYLENE CHLORIDE (ug/1)			ו עא	WD I	MD I	MD 200	MD 100	1.5	0.4	WD . 3	J	

TABLE 13

CHEMICAL ANALYSIS OF

SPLIT SAMPLES

Micrograms Per Liter (ppb)

	==		=======		=========			************	***********	=========		
	::	}	MW 4A	1		MW 4		: HW 10) :		MW 11	::
	,							•				
COMPOUND		C.R.L.	D.H.S.		C.R.L.	D.H.S.		C.R.L.	9 & C :	C.R.L.	D.H.S.	B & C :
!!	,, ;;							!	:			11
: Chloromethane	11		ND 5	ND 5 ;	ND 20	ND .5	ND 5	ND 1	ND .5 !	ND 1	ND .5	ND .5 11
:: Brosomethane	!!	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND .5 :	ND 1	N5 .5	ND .5 !!
:: Vinyl Chloride	11	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND .5 :	ND 1	ND .5	ND .5 11
:: Chloroethane	11	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND .5 1	ND 1	ND .5	ND .5 ::
:: Methylene Chloride	11	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND 2 :	3	ND .5	ND 2 :
:: 1,1-Dichloroethene	11	ND 250	2	ND 5 ;	56	68	49	ND 1	ND .5 !	2.3	ND .5	1.6 11
: 1,1-Dichloroethane	11	ND 250	ND 5	ND 5 :	70	84	77	3.7	ND .5 1	2.5	2.1	1.5 ::
:: Trans-1,2-Dichloroethene	11	ND 250	ND 5	ND 5 :	ND 20	ND .5	9.8	ND 1	ND .5 ;	ND 1	ND .5	ND .5 !!
:: Chlorofora	::	ND 250	18	23 :	ND 20	ND .5	7.8	ND 1	ND .5 1	ND 1	ND .5	0.6 ::
1: 1,2-Dichloroethane	11	ND 250	ND 5	46 :	35	ND .5	38	15	12 ;	21	8.5	14 11
1: 1,1,1-Trichloroethane	11	1 680	ND 5	ND 5 1	24	ND .5	ND 5	2.3	ND .5 1	ND 1	ND .5	ND .5 !!
:: Carbon Tetrachloride	11	ND 250	ND 5	ND 5 1	ND 20	ND .5	ND 5	ND 1	ND .5 :	ND 1	ND5	ND .5 !!
Trichlorofluoromethane	11	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND .5 1	ND 1	ND .5	ND .5 !!
1: 1,2-Dichloropropane	11	ND 250	36	ND 5 :	ND 20	ND .5	ND 5	! ND 1	ND .5 :	ND 1	ND .5	ND .5 11
!! Trichloroethene	11	ND 250	42	49 ;	110	225	210	14	37 !	20	30	25 11
:: Dibromochloromethane	;;	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	: ND 1	ND .5 :	ND 1	ND .5	ND .5 11
<pre>!! 1,1,2-Trichloroethane</pre>	! ;	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	: ND 1	ND .5 :	ND 1	ND .5	ND .5 11
¦¦ cis-1,3-Dichloropropene	11	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	: ND 1	ND .5 :	ND 1	ND .5	ND .5 11
:: 2-Chloroethyl Vinyl Ether	;;	ND 250	ND 5	ND 5 1	ND 20	ND .5	ND 5	ND 1	ND .5 :	ND 1	ND .5	ND .5 1
li Bromoform	1:	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	: ND 1	ND .5 ;	ND 1	ND .5	ND .5 11
Tetrachloroethene	;;	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	; ND 1	ND .5 :	ND 1	ND .5	ND .5 11
1; 1,1,2,2-Tetrachloroethane	::	ND 250	ND 5	ND 5 1	ND 20	ND .5	ND 5	! ND 1	ND .5 f	ND 1	ND .5	ND .5 !!
:: Chlorobenzene	::		ND 5	ND 5 1	ND 20	ND .5	ND 5	I ND 1	ND .5 :	ND 1	ND .5	ND .5 13
:: Bromodichloromethane	;;	ND 250	ND 5	ND 5 :	ND 20	MD .5	ND 5	ND 1	ND .5 ;	ND 1	ND .5	ND .5 #
11 1,2-Dichlorobenzene	;;	ND 250	ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND .5 :	ND 1	ND .5	ND .5 ::
11 1,3-Dichlorobenzene	11	ND 250	ND 5	ND 5 1	ND 20	ND .5	ND 5	ND 1	ND .5 :	ND 1	ND .5	ND .5 !!
<pre>1: 1,4-Dichlorobenzene</pre>	::		ND 5	ND 5 :	ND 20	ND .5	ND 5	ND 1	ND .5 !	ND 1	ND .5	ND .5 11
!! Benzene	11	MD 175	15	ND 5 :	ND 14	ND .5	ND 5	ND .7	ND .5 :	ND .7	ND .5	ND .5 13
:: Toluene	11	B,500	11,300	7,300 :	180	252	200	ND 1	0.7 :	ND 1	ND .5	ND .5 ::
!! Ethyl Benzene	11	8,500	11,500	6,600 ;	70	99	70	ND 1	1.7 :	ND 1	46	25 !!
!! Total Xylenes	11		20,200	12,000 1	200	309	280	: ND 1	4.4 :	17	ND .5	4 ::
11	11	1						•	:			!!
**********************	====		222:::::::::				********			*******	*********	=======;

NOTE: ND 1 = Compound was not detected at 1 ug/1.

B & C = Brown & Caldwell Laboratories

A.T.I. = Analytical Technologies, Inc.

D.H.S. = California Department of Health Services

TABLE 14
SEQUENCE OF SAMPLING

		 			P A R A M E T E R S		. ,,	·
=======			*****************			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
!! !! MON!		1,1-D1CHLORDETHANE	: : 1,1-DICHLOROETHYLENE:	ETHYL BENZENE	: TRICHLORDETHYLENE	: TOLUENE	: CHLOROFORM	: METHYLENE CHLORIDE
!!	=======================================	;;	;		!	!	1	1
!!	QC 1852	## ND 1	; ND 1	ND 1	: ND 1	HD 1	: ND 1	I ND 1
11	HW 1	ND 1	, ND 1 :	ND 1	4	ND 1	i ND 1	I NB 1
!!	HW 2	11 ND 1	;	ND 1	: : 5	: : ND 1	! ! ND 1	: ND 1
!!	NH Z	11 MV 1	; 401 ;	KU 1	; 3 !	; NU 1	i RU I	1 401
11	MW 5	II ND 1	ND 1	ND 1	5	ND 1	10	ND 1
}} !!	QC 1898	!! !! ND 1	:	ND 1	: : ND 1	! ND 1	; ; ND 1	1 1 ND 1
11		11	1		1	1	1	1
!!	HW 11	2.5	2.3	17	1 20	ND 1	21	; 2
!!	. MM 2	!! !! ND 10	: ND 10	8500	i i 14	8500	ND 10	i i ND 10
11		11	! ;		:	1	1	1
;;	MW 4	11 70	56	70	110	180	! ND 20	: ND 20
;;	QC 1951	 !! MD 1	ND 1	ND 1	ND 1	ND 1	. ND 1	: ND 1
11		!;	1		1	!	1	1
11	MW 10	3.7	; ND 1	ND 1	14 !	! ND 1	: ND 1	ND 1
;;	NH 9	11 40	50	ND 1	17	ND 1	13	35
11	a	11	1		1 17	1	1	; , NR 4
11	MM 8	11 50 11	2.8	ND 1	: 17 :	ND 1	: ND 1	: ND 1
11	QC 2002	11 ND 1	I ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
**	HW 4A		ND 1	ND 1	2	: : ND 1	; ND 1	: : ND 1
11	T# 7H		, AU 1	W 1	1	1	1	1
11	MW &B	H ND 1	t ND 1	ND 1	22	HD 1	! ND 1	! ND 1
!!	MW 7	:: :: ND 1	: ND 1	! ! ND 1	1 24	: : ND 1	; ND 1	; ; ND 1
;;	ri# /	NV 1	1	1 10 1	1	;	1	1
**	BC 2049	II NO 1	1 ND 1	ND 1	I ND 1	: ND 1	: ND 1	! ND 1

NOTES: Concentrations are in ug/L (ppb).

ND .5 = Compound was not detected at 1 ug/L.

ND .5 = Compound was detected at 1 ub/l.

- 1

TABLE 15

CHEMICAL ANALYSIS OF

SPIKED SAMPLES

	A.T.I.		.R.L.	B&C			
	: Concentration	Analyzed Concentration	1 Difference	Analyzed Concentration	1 Difference		
TOLUENE (ug/1)	88	67	76	76	86		
ETHYL BENZENE (ug/l)	81	78	96	, 77	95		
TRICHLORDETHYLENE (ug/1)	70	40	57	70	100		

NOTE: A.T.I. = Analytical Technologies, Inc.

B & C = Brown & Caldwell Laboratories

C.R.L. = Chemical Research Laboratories

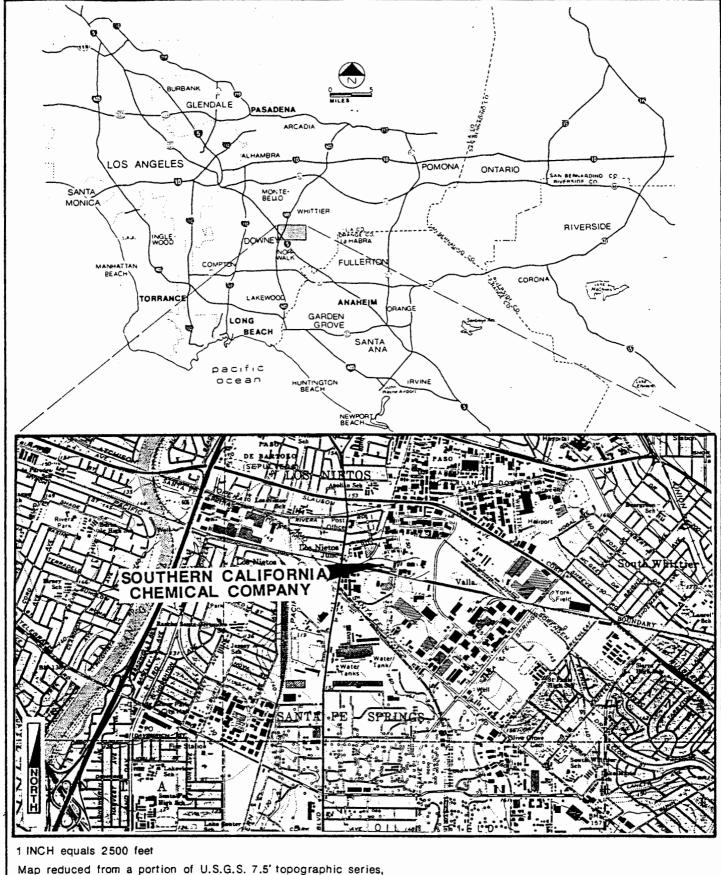
TABLE 16

GROUNDWATER LEVEL ELEVATIONS

(feet MSL)

Well Number	Well Head Elevation (feet MSL)	(Feet Below Wel) Depth	Ground Surface) Perforated Interval	2-22-85 to 3-12-85	4-09-85	7-24-85 to 8-05-85	6-19-85	9-20-85	3-19-86	7-09-86	9-24-86	12-17-86	3-31-87	7/1/87	10/17/87	2/2/88
1	152.6	62.5	42.5-62.5	108.49	108.48	109.66	108.16	106.05	103.46	107.78	105.15	103.65	103.71	103.57	100.09	100.21
2	151.56	74.0	44-74	107.31	107.72	109.21	107.56	105.49	102.44	107.04	104.05	102.96	106.58	103.95	98.85	99.24
3	151.62	75.0	45-75	106.37	107.52	108.37	106.65	104.46	101.22	106.03	103.15	102.07	102.96	101.87	97.77	98.22
4	149.76	75.0	45-75	105.76	108.11	108.36	105.16	104.50	101.42	105.94	102.98	101.81	101.78	102.95	97.76	98.21
4A	152.49	107.0	87-107			108.84	109.43	104.49	102.67	107.29	104.29	102.09		104.19	98.92	98.47
5	153.21	75.0	45-75	105.71	106.02	107.68	106.03	103.84	100.46	105.40	102.49	101.41	101.37	98.51	96.24	97.52
6A	149.31	30.0	10-30		119.39		120.91									
6B	147.46	77.0	47-77	106.46	106.80		107.81	104.92	101.48	106.02	103.21	102.16	101.95	103.11	98.28	98.44
7	149.27	75.0	45-75			107.48	105.34	104.33	101.07	105.73	102.63	101.57	101.52	99.20	97.75	98.22
8	149.53	71.0	41-71			107.95	106.86	104.78	101.65	106.26	103.17	101.98	101.68	101.52	98.12	98.19
9	151.14	77.0	47-77			108.35	106.98	104.25	162.14	106.72	103.64	102.74	104.02	103.53	98.56	98.85
10	151.60	75.0	45-75			107.88	106.94	104.87	102.80	106.26	103.15	102.40	102.62	102.14	98.01	98.69
11	152.80	75.5	55-75			108.38	107.17	105.03	101.96	106.61	103.34	102.65	102.91	102.41	98.21	98.97
																74111

NOTE: MSL = Elevations in feet above mean sea level.



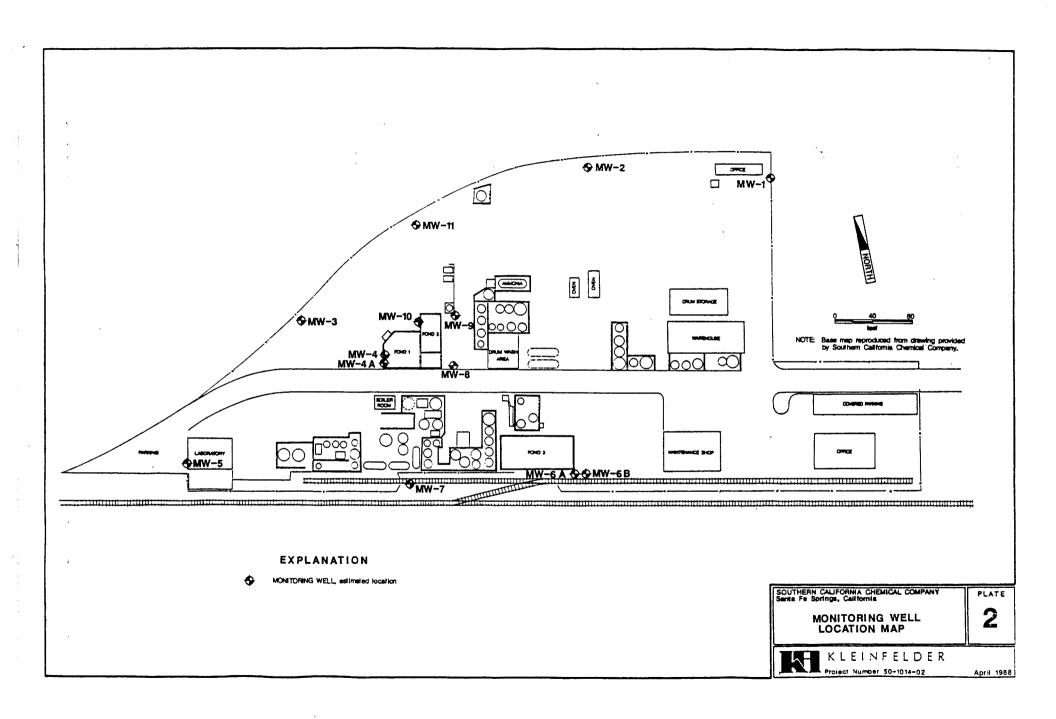
Map reduced from a portion of U.S.G.S. 7.5' topographic series, Whittier, California Quadrangle.

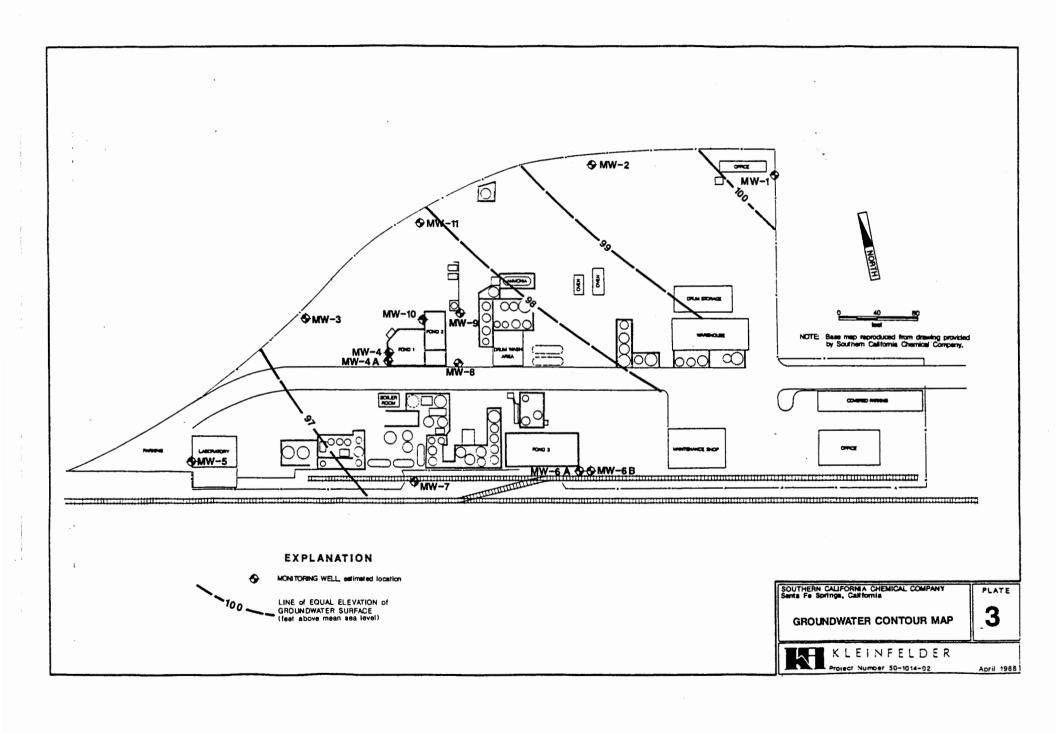


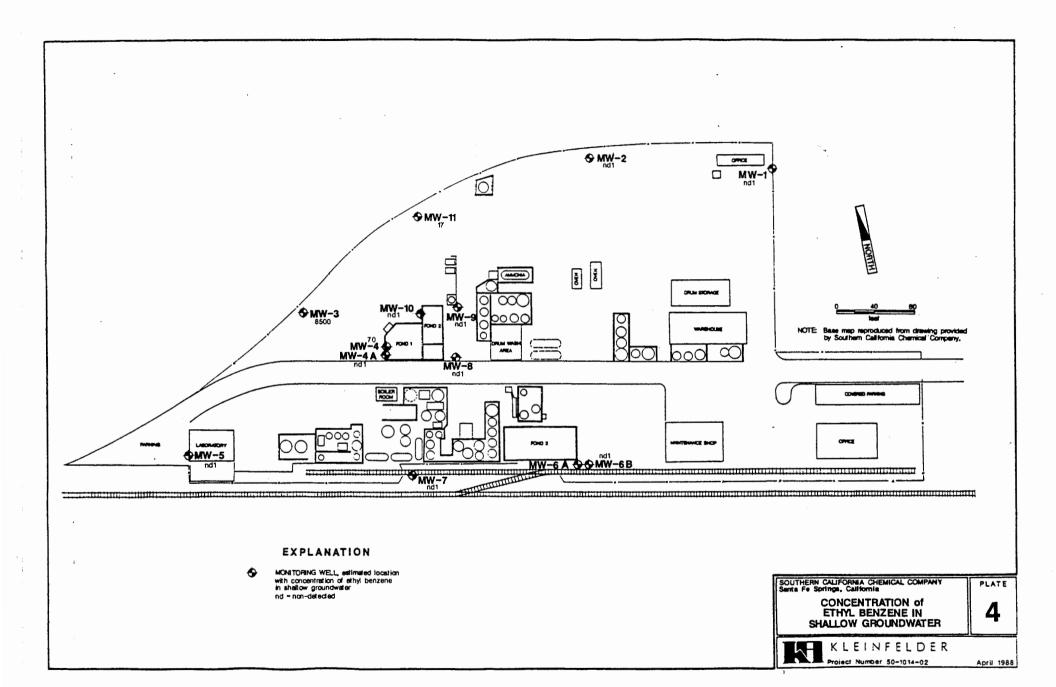
SOUTHERN CALIFORNIA CHEMICAL COMPANY Santa Fe Springs, California

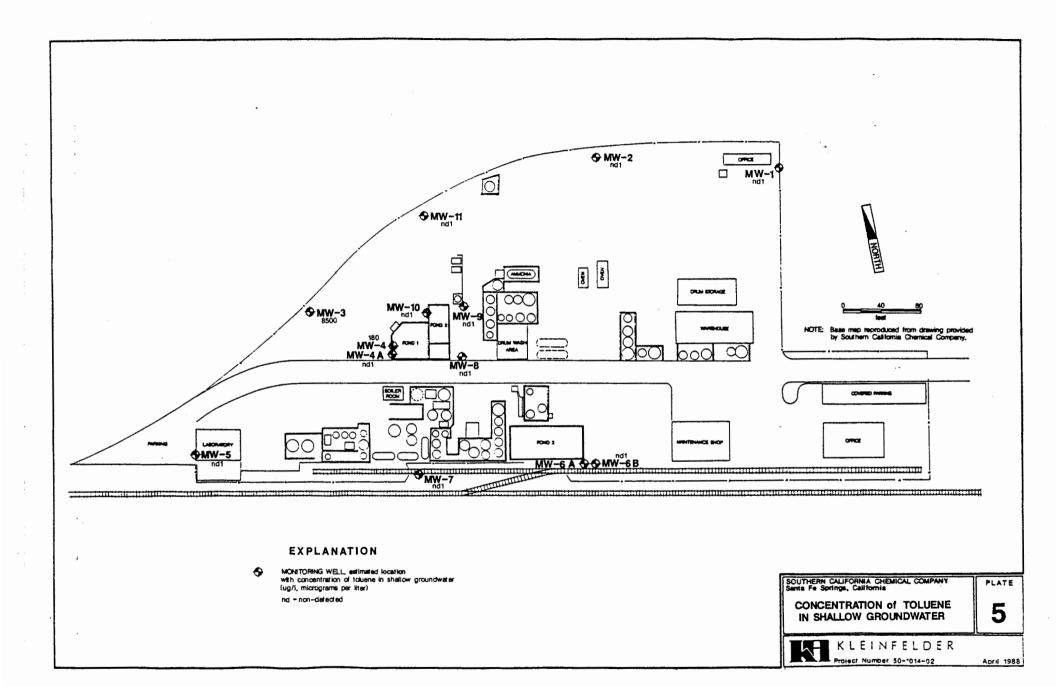
SITE LOCATION MAP

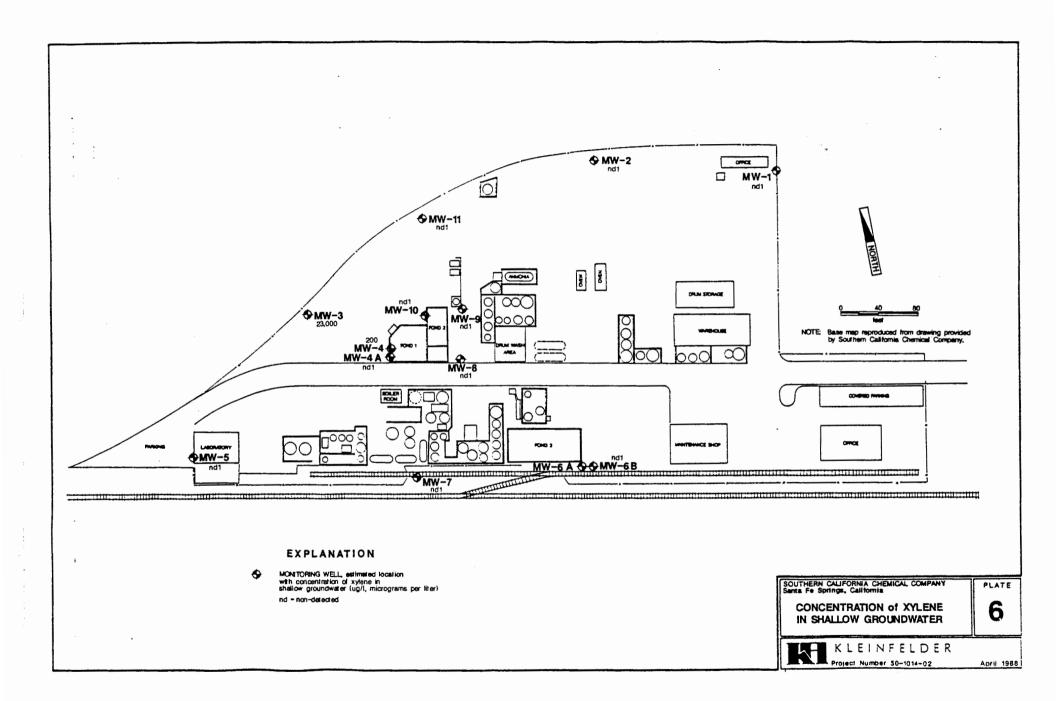
PLATE











APPENDIX A

Groundwater Sampling Protocol

APPENDIX A MONITORING WELL GROUNDWATER SAMPLING PROTOCOL

DECONTAMINATION

The following procedure details the routine that is employed in decontamination of groundwater sampling equipment prior to sample collection:

- o Exterior surface of sampling tubes are decontaminated by steam-cleaning during withdrawal from every well.
- o Sample pump is disassembled and the used bladder removed.
- o All pump components are then steam-cleaned and rinsed in distilled water.
- o Pump is re-assembled with a new bladder installed.
- o Teflon sampler lines are pressure washed with 5 to 10 gallons of clean, hot water through direct connection to a steam-cleaner.
- o Five gallons of distilled water are then pumped through entire system.
- o Prior to sample collection, a minimum of five well volumes are purged from the well to permit collection of a representative groundwater sample from the aquifer penetrated.

PURGE VOLUME DETERMINATION

The following procedure is followed to determine the appropriate purging volume prior to well sampling.

- o The depth-to-water is measured by a clean, electric water level indicator. Measurement datum is the top of fill ring.
- O Depth to the bottom of the well is measured by a clean tape and plumb bob. If possible, this is compared to the well construction log to determine inconsistencies, i.e,., damaged casing, sediment presence in casing, etc.
- o Water volume is calculated by multiplying total water depth by the volume of one foot of the casing. This figure is one well volume.

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WELL PURGING AND SAMPLING

- o Prior to sampling, a minimum of three to five well volumes are purged from each well to ensure that water sampled is representative of the groundwater within the formation.
- o Measurements of pH, conductivity and temperature are taken at frequent intervals during the purge. Stabilization of these values indicates that representative formation fluids are being removed from the well.
- o In the event that the well is pumped dry, an alternate procedure will be followed. Once a well is pumped dry, the water that enters the well during recovery is, by definition, representative formation water. The well will, therefore, be pumped dry and allowed to recover to 80 percent or more of the original water level.
- o Purge water is pumped directly into barrels on-site until the proper method of disposal is determined.
- o Samples pumped directly into sampling bottles prepared by the state certified laboratory contracted for the particular job are labeled and placed in clean field ice chests filled with chemical ice ("Blue Ice") for transport to the laboratory.
- o Samples are delivered directly to the laboratory on the same day of sampling by courier, whenever practical. If next-day delivery is necessary, the samples are kept refrigerated at 4 degrees Celsius overnight and delivered to the laboratory the following morning.
- o Samples are accompanied by a Chain-of-Custody form which documents the time, date, and responsible person during each step of the transportation process.
- o The Kleinfelder coded sample numbering system allows identification of sample and client to Kleinfelder, while not revealing the client to the laboratory or other interested parties.

o Water samples are numbered in the following manner:

W-XX-YY

Where:

W - designates water sample XX - well number YY - sequential sample number

For example, W-01-22 indicates a water sample from well number 1. The sample is the 22nd water sample taken at the site.

o The complete information on the sample label includes:

Date and time
Client job number (never client name)
Sample number
Initials of sampler
Analysis desired (if known)
Preservative in sample bottle (usually noted by laboratory)

- o Each sample bottle is given a separate sequential number.
- O An indelible, non-water soluble marking pen is used to mark the sample label.

APPENDIX B

Analytical Results



ATI I.D. 802033

February 17, 1988

J. H. Kleinfelder & Associates 17100 Pioneer Blvd., Suite 350 Artesia, California 90701

Attention: Ken Durand

On February 3, 1988, Analytical Technologies, Inc. prepared one water sample. The sample was analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. Please see the attached sheet for the sample cross reference.

The results, sample cross reference, and the quality control data are enclosed.

Patricia A. Schroder

GC Supervisor

PS: mag

Richard M. Amano Laboratory Manager



ANALYTICAL SCHEDULE

CLIENT: J.H. KLEINFELDER-ARTESIA PROJECT NO.: (NONE)

PROJECT NAME: (NONE)

TECHNIQUE REFERENCE/METHOD

PURGEABLE HALOCARBONS GC/HALL EPA 601

PURGEABLE AROMATICS GC/PID EPA 602

: KLEINFELDER-ARTESIA

: (NONE) PROJEC NAME: (NONE) DATE RECEIVED: 02/03/88

REPORT DATE : 02/17/88

ATI I.D. : 802033

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	CHECK SAMPLES	WATER	02/02/88

---- TOTALS ----

MATRIX # SAMPLES WATER 1

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

GAS CHROMATOGRAPHY - RESULTS



ATI I.D. : 80203301

TEST: VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

	CLIENT : KLEINFELDER-ARTESIA PROJECT # : (NONE) PROJECT NAME : (NONE) CLIENT I.D. : CHECK SAMPLES SAMPLE MATRIX : WATER	DATE SAMPLED : 02/02/88 DATE RECEIVED : 02/03/88 DATE EXTRACTED : N/A DATE ANALYZED : 02/12/88 UNITS : UG/L DILUTION FACTOR : 20
		RESULTS
	BENZENE	<10
	BROMODICHLOROMETHANE	<4.0
	BROMOFORM	<4.0
	BROMOMETHANE	<4.0
	CARBON TETRACHLORIDE	<4.0 <10
	CHLOROB ENZ EN E CHLOROETHAN E	<4.0
_	CHLOROFORM	<4.0
	CHLOROMETHANE	<4.0
		<4.0
	1,2-DICHLOROBENZENE	<10
	1,3-DICHLOROBENZENE	<10
	1,4-DICHLOROBENZENE	<10
9000	DICHLORODIFLUOROMETHANE	<4.0
	1,1-DICHLOROETHANE	<4.0
	1,2-DICHLOROETHANE	<4.0
-	1,1-DICHLOROETHENE	<4.0
	TRANS-1,2-DICHLOROETHENE	<4.0
	1,2-DICHLOROPROPANE	<4.0 <4.0
	CIS-1,3-DICHLOROPROPENE	<4.0
	TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE	81
	METHYLENE CHLORIDE	<40
400	1,1,2,2-TETRACHLOROETHANE	<4.0
	TETRACHLOROETH ENE	<4.0
	TOLUENE	88
	1,1,1-TRICHLOROETHANE	<4.0
_	1,1,2-TRICHLOROETHANE	<4.0
	TRICHLOROETHENE	70
فلعون	TRICHLOROFLUOROMETHANE	<40
-	VINYL CHLORIDE	<4.0
	META XYLENE	<10
	ORTHO & PARA XYLENE	<10

SURROGATE PERCENT RECOVERIES

	D DOMOGUT OD ON THE TANK	/ Q . \		00
-	BROMOCHLOROMETHANE	(も)	•	90
_	TRIFILIOROTOLUENE (%))		96

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GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST: VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER-ARTESIA DATE EXTRACTED : 02/12/88
PROJECT # : (NONE) DATE ANALYZED : 02/12/88
PROJECT NAME : (NONE) UNITS : UG/L
CLIENT I.D. : REAGENT BLANK DILUTION FACTOR : N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
■ BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
_ CARBON TETRACHLORIDE	<0.2
CHLOROB ENZ EN E	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
- CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
- TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5
SURROGATE PERCENT RE	COVERIES
BROMOCHLOROMETHANE (%)	92

BROMOCHLOROMETHANE (%)	92
TRIFLUOROTOLUENE (%)	100

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553

February 10, 1988

Mr. Ken Durand J.H. Kleinfelder & Associates 17100 Pioneer Boulevard, Suite 350 Artesia, California 90701

Dear Mr. Dumand:

Brown and Caldwell analyzed five groundwater samples taken February 3, 1988, for Project Q-1014. A summary of the methods used in analysis is provided below:

Analyte	Method Number	Reference	Description
Purgeable halocarbons	601	1	GC/Hall
Volatile aromatics	602	1	GC/PID

Reference:

1. 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, Federal Register, October 26, 1984.

Should you have any questions, please do not hesitate to call us.

Very truly yours,

BROWN AND CALDWELL

Jane Freemyer /

Client Services Manager

JF: lah

ANALYTICAL REPORT

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553 • FAX (818) 795-8579

LOG NO: P88-02-102

Received: 04 FEB 88 Reported: 12 FEB 88

Ken Durand
J. H. Kleinfelder & Associates
17100 Pioneer Blvd., Suite 350
Artesia, California 90701

Project: Q-1014

·	REPORT OF	ANALYTIC	CAL RESUL	LTS		Page 1
LOG NO SAMPLE DESCR	RIPTION, GROUND	WATER S	SAMPLES		DA	ATE SAMPLED
02-102-1 W-11-(1915,1 02-102-2 W-03-(1919,1 02-102-3 W-04-(1936,1 02-102-4 W-10-(1955,1 02-102-5 W-00-(2051,2	1920) 1937) 1956)					03 FEB 88 03 FEB 88 03 FEB 88 03 FEB 88 03 FEB 88
PARAMETER	02-10	2-1 02	2-102-2	02-102-3	02-102-4	02-102-5
Halocarbons (EPA 601) Date Analyzed Dilution Factor, Times 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane, ug/ 1,1-Dichloroethane, ug/ 1,2-Dichloroethane, ug/ trans-1,2-Dichloroethane, ug/ trans-1,2-Dichloroethane, ug/ trans-1,2-Dichloroethane, ug/ trans-1,2-Dichloroethane, ug/ trans-1,2-Dichloroethane, ug/ 2-Chloroethylvinylether Bromodichloromethane, ug/ Bromoform, ug/L Chlorobenzene, ug/L Carbon Tetrachloride, ug/L Chloroethane, ug/L Chloroform, ug/L Chloromethane, ug/L Chloromethane, ug/L Dibromochloromethane, ug/L	ane, ug/L ug/L /L g/L /L ne, ug/L g/L g/L g/L g/L g/L g/L c, ug/L ig/L ig/L <pre> </pre> <pre> </pre> <pre> clay/L </pre> <pre> <pre> clay/L </pre> <pre> </pre> <pre> clay/L </pre> <pre> </pre> <pre> clay/L </pre> <pre> </pre> <pre> clay/L </pre> <pre> <pre> clay/L </pre> <pre> <pre> clay/L </pre> <pre> <pre> clay/L </pre> <pre> clay/L <td>/88 02 0.5 0.5 1.6 0.5 1.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5</td><td>2/06/88 10 <55 <55 <55 <55 <55 <55 <55 <55 <55 <5</td><td>02/06/88 10 <5 <5 77 49 <5 38 9.8 <5 <5 <5 <5 <5 <5 <5 <5</td><td>1 <0.5 <0.5 3.4 3.6 <0.5 12 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5</td><td>1 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5</td></pre></pre></pre></pre></pre>	/88 02 0.5 0.5 1.6 0.5 1.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	2/06/88 10 <55 <55 <55 <55 <55 <55 <55 <55 <55 <5	02/06/88 10 <5 <5 77 49 <5 38 9.8 <5 <5 <5 <5 <5 <5 <5 <5	1 <0.5 <0.5 3.4 3.6 <0.5 12 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	1 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5

ANALYTICAL REPORT

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553 • FAX (818) 795-8579

LOG NO: P88-02-102

Received: 04 FEB 88 Reported: 12 FEB 88

Ken Durand J. H. Kleinfelder & Associates 17100 Pioneer Blvd., Suite 350 Artesia, California 90701

trans-1,3-Dichloropropene, ug/L

Project: Q-1014

	KEF	URI OF ANAL	ITICAL RESU	LIS *	• •	rage 2
LOG NO .	SAMPLE DESCRIPTION,	GROUND WAT	ER SAMPLES		DA	te sampled
02-102-1 02-102-2 02-102-3 02-102-4 02-102-5	W-11-(1915,1916) W-03-(1919,1920) W-04-(1936,1937) W-10-(1955,1956) W-00-(2051,2052)					03 FEB 88 03 FEB 88 03 FEB 88 03 FEB 88
PARAMETER		02-102-1	02-102-2	02-102-3	02-102-4	02-102-5
Methylene Tetrachlor 1,1,1-Tric Trichloror Trichloror	ifluoromethane, ug/L chloride, ug/L roethene, ug/L chloroethane, ug/L ethylene, ug/L fluoromethane, ug/L oride, ug/L	<0.5 <2 <0.5 <0.5 25 <0.5 <0.5	<5 <5 <5 <5 49 <5 <5	<5 <5 <5 <5 210 <5 <5	<0.5 <2 <0.5 <0.5 <0.5 37 <0.5 <0.5	<0.5 <2 <0.5 <0.5 70 <0.5 <0.5
cis-1.3-D:	ichloropropene, ug/L	<0.5	<5	<5	<0.5	<0.5

<0.5

ANALYTICAL REPORT

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553 • FAX (818) 795-8579

LOG NO: P88-02-102

Received: 04 FEB 88 Reported: 12 FEB 88

Ken Durand J. H. Kleinfelder & Associates 17100 Pioneer Blvd., Suite 350 Artesia, California 90701

Project: Q-1014

REPORT OF ANALYTICAL RESULTS

Page 3

LOG NO SAMPLE DESCRIPTION,	GROUND WAS	TER SAMPLES		DA	TE SAMPLED
02-102-1 W-11-(1915,1916) 02-102-2 W-03-(1919,1920) 02-102-3 W-04-(1936,1937) 02-102-4 W-10-(1955,1956) 02-102-5 W-00-(2051,2052)					03 FEB 88 03 FEB 88 03 FEB 88 03 FEB 88 03 FEB 88
PARAMETER	02-102-1	02-102-2	02-102-3	02-102-4	02-102-5
Vol.Aromatics (EPA-602) Date Analyzed Dilution Factor, Times 1 Chlorobenzene, ug/L 1,2-Dichlorobenzene, ug/L 1,3-Dichlorobenzene, ug/L 1,4-Dichlorobenzene, ug/L Benzene, ug/L Ethylbenzene, ug/L Toluene, ug/L	02/06/88 1 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	02/08/88 100 <50 <50 <50 <50 <50 6600 7300	02/06/88 10 <5 <5 <5 <5 <5 <70 200	02/06/88 1 <0.5 <0.5 <0.5 <0.5 <0.5	02/06/88 1 <0.5 <0.5 <0.5 <0.5 <0.5 77
Additional Compounds: Total Xylene Isomers, ug/L	4.0	12000	280	4.4	<0.5

Samples P88-01-102-1 and -2 for EPA 601 had to be run diluted due to high levels of contamination. -- T. Gaynor

Edward Wilson, Laboratory Director



SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way ● Garden Grove, CA 92641
(714) 898-6370 ● FAX: (714) 891-5917 ● (800) LAB-1CRL

February 22, 1988

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand ANALYSIS NO.: 803515-001/067

ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

PROJECT: #50-1014-3

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: 803515-001/067 shown above.

Sixty seven liquid samples were received by CRL in a chilled state, intact, and with the chain-of-custody record attached.

REVIEWED AND APPROVED



SOUTHERN CALIFORNIA DIVISION

7440 Lincoln Way ● Garden Grove, CA 92641 (714) 898-6370 ● FAX: (714) 891-5917 ● (800) LAB-1CRL

LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

ANALYSIS NO.: 803515-001/067 ANALYSES: See Attachments

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

PROJECT: #50-1014-3

The following tests were performed on the samples received:

TEST	<u>METHOD</u>	REFERENCE	COMMENTS
Aromatic Volatile Organics	EPA 602	EPA 600, 1982	GC/PID detector
Halogenated Volatile Organics	EPA 601	*EPA 601, 1982	GC/Hall detector
Chromium, Hexavalent	EPA 7196	SW 846, 1986	Spectrophotometer
CAC Metals (Totals)	EPA 6010	SW 846, 1986	ICAP/AA
рН	EPA 9040	SW 846, 1986	pH meter
Specific Conductance	EPA 9050	SW 846, 1986	Conductivity meter
Chloride	EPA 300.0	SW 846, 1986	Water Extraction/IC
Nitrate	EPA 300.0	*EPA 600	Water Extraction/IC
Total Organic Halogens	EPA 9020	SW 846,, 1986	Carbon Adsorption, Microcoulometric- Titration Detector
Total Organic Carbon	EPA 9060	SW 846, 1986	Infrared Detector

^{*} Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.



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QA/QC SUMMARY

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

ANALYSIS NO.: 803515-001/067

ANALYSES: See Attachments DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

PROJECT: #50-1014-3

QA/QC SUMMARY

		Average trix Spike	Acceptable	Relative Percent	Acceptable
<u>Date</u>		Recovery%	_	Difference	-
02/10/88	Toluene (EPA 602)	71.	60-120.	8.	40.
02/10/88	O-Xylene (EPA 602)	68.	60-120.	9.	40.
02/10/88	1,1 DCE (EPA 601)	80.	60-120.	11.	40.
02/10/88	Chlorobenzene (EPA 6	01) 83.	60-120.	21.	40.
02/10/88	Trichloroethene (EPA	601) 66.	60-120.	2.	40.
02/10/88	Nitrate (EPA 300.0)	102.	87-121.	2.	10.
02/10/88	Chloride (EPA 300.0)	99.	90-112.	1.	10.
02/10/88	Total Organic Carbon (EPA 9060)	s 104.	50-130.	1.	30.
02/12/88	Total Organic Haloge (EPA 9020)	n 86.	50-130.	4.	30.
02/17/88	Antimony (EPA 6010)	102.	76.4-129.	0.	20.
02/17/88	Barium (EPA 6010)	104.	90.4-114.5	0.	18.
02/17/88	Cadmium (EPA 6010)	95.	80-120.	0.	25.
02/17/88	Chromium (EPA 6010)	104.	90.3-138.6	1.	35.
02/17/88	Copper (EPA 6010)		69.3-125.9		28.
02/17/88	Zinc (EPA 6010)	105.	98.5-116.8		17.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-07-2048

ANALYSIS NO.: 803515-062

ANALYSES: Metals

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/09-17/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

CAC METALS ANALYSIS (Total)

UNITS: mq/L

METALS	RESULTS	BLANK	DETECTION LIMIT
Cadmium	ND	ND	0.02
Chromium	0.02	ND	0.02
Copper	ND	ND	0.02
	ND	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-6B-2033

ANALYSIS NO.: 803515-047

ANALYSES: Metals

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/09-17/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

CAC METALS ANALYSIS (Total)

UNITS: mg/L

METALS	RESULTS	BLANK	DETECTION LIMIT
Cadmium	ND	ND	0.02
Chromium	0.02	ND	0.02
Copper	ND	ND	0.02
Zinc	ND	ND	0.02



SOUTHERN CALIFORNIA DIVISION

7440 Lincoln Way ● Garden Grove, CA 92641 (714) 898-6370 ● FAX: (714) 891-5917 ● (800) LA8-1CRL

LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350 Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2018

ANALYSIS NO.: 803515-032

ANALYSES: Metals

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88
DATE ANALYZED: 02/09-17/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

CAC METALS ANALYSIS (Total)

UNITS: mg/L

METALS	RESULTS	BLANK	DETECTION LIMIT
Cadmium Chromium	ND 0.03	ND ND	0.02
Copper	ND ND	ND ND	0.02



SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-08-2001

ANALYSIS NO.: 803515-015

ANALYSES: Metals

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/09-17/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

CAC METALS ANALYSIS (Total)

UNITS: mg/L

METALS	RESULTS	<u>BLANK</u>	DETECTION LIMIT
Cadmium	ND	ND	0.02
Chromium	0.03	ND	0.02
Copper	ND	ND	0.02
Zinc	ND	ND	0.02



SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-07-2045

ANALYSIS NO.: 803515-059 ANALYSES: Miscellaneous

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040)	8.93	N/A	N/A
Specific Conductance (uMHOS/cm) (EPA 9050)	8500.	N/A	N/A



SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-07-2047

ANALYSIS NO.: 803515-061 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT	
pH (units) (EPA 9040)	8.93	N/A	N/A	
Specific Conductance (uMHOS/cm) (EPA 9050)	8500.	N/A	N/A	



SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-07-2044

ANALYSIS NO.: 803515-058 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88
DATE ANALYZED: 02/09-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mq/L

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040) Nitrate (EPA 300.0)	8.95 ND	N/A ND	N/A 1.
(Nitrate as Nitrogen) Chloride (EPA 300.0)	ND 1900.	ND ND	0.2
Specific Conductance (uMHOS/cm) (EPA 9050)	8500.	N/A	N/A
Chromium, Hexavalent (EPA 7196)	ND	ND	0.1



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-6B-2032

ANALYSIS NO.: 803515-046 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT	
pH (units) (EPA 9040)	7.15	N/A	N/A	
Specific Conductance	1260.	N/A	N/A	
(uMHOS/cm) (EPA 9050)				



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-6B-2031

ANALYSIS NO.: 803515-045 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040)	7.12	N/A	N/A
Specific Conductance (uMHOS/cm) (EPA 9050)	1260.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-6B-2030

ANALYSIS NO.: 803515-044 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040)	7.16	N/A	N/A
Specific Conductance (uMHOS/cm) (EPA 9050)	1280.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-6B 2029

ANALYSIS NO.: 803515-043 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/09-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mq/L

PARAMETERS (units)	RESULTS	<u>BLANK</u>	DETECTION LIMIT
pH (units) (EPA 9040) Nitrate (EPA 300.0) (Nitrate as Nitrogen) Chloride (EPA 300.0)	7.11 37. 8.4 61.	N/A ND ND ND	N/A 1. 0.2 1.
Specific Conductance (uMHOS/cm) (EPA 9050)	1260.	N/A	N/A
Chromium, Hexavalent (EPA 7196)	ND	ND	0.1



LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2017

ANALYSIS NO.: 803515-031 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

RESULTS	BLANK	DETECTION LIMIT	
7.30 1650.	N/A N/A	N/A N/A	
	7.30	7.30 N/A	



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2016

ANALYSIS NO.: 803515-030 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040) Specific Conductance (uMHOS/cm) (EPA 9050)	7.30 1700.	N/A N/A	N/A N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2015

ANALYSIS NO.: 803515-029 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040)	7.32	N/A	N/A
Specific Conductance (uMHOS/cm) (EPA 9050)	1700.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2014

ANALYSIS NO.: 803515-028 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/09-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040) Nitrate (EPA 300.0) (Nitrate as Nitrogen) Chloride (EPA 300.0)	7.27 17. 3.8 97.	N/A ND ND ND	N/A 1. 0.2 1.
Specific Conductance (uMHOS/cm) (EPA 9050)	1600.	N/A	N/A
Chromium, Hexavalent (EPA 7196)	ND	ND	0.1



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-08-2000

ANALYSIS NO.: 803515-014 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040) Specific Conductance (uMHOS/cm) (EPA 9050)	7.22 1550.	N/A N/A	N/A N/A

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-08-1999

ANALYSIS NO.: 803515-013 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040) Specific Conductance (uMHOS/cm) (EPA 9050)	7.26 1550.	N/A N/A	N/A N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701 ATTN: Mr. Ken Durand

SAMPLE ID: W-08-1998

ANALYSIS NO.: 803515-012 ANALYSES: Miscellaneous DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS (units)	RESULTS	<u>BLANK</u>	DETECTION LIMIT
pH (units) (EPA 9040)	7.23	N/A	N/A
Specific Conductance	1550.	N/A	N/A
uMHOS/cm) (EPA 9050)			



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-08-1997

ANALYSIS NO.: 803515-011 ANALYSES: Miscellaneous

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/09-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mq/L

PARAMETERS (units)	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9040) Nitrate (EPA 300.0)	7.20 20.	N/A ND	N/A 1.
(Nitrate as Nitrogen)	4.5	ND	0.2
Chloride (EPA 300.0)	140.	ND	1.
Specific Conductance (uMHOS/cm) (EPA 9050)	1550.	N/A	N/A
Chromium, Hexavalent (EPA 7196)	ND	ND	0.1



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

ANALYSIS NO.: 803515-007/057 ANALYSES: EPA Method 9020

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/12/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 9020 TOTAL ORGANIC HALOGENS

UNITS: ug/L

ANALYSIS NO.

(SAMPLE ID.)	RESULTS	BLANK	DETECTION LIMIT
W-08-1993	53.	ND	10.
W-08-1994	50.	ND	10.
W-08-1995	26.	ND	10.
W-08-1996	20.	ND	10.
W-4A-2010	10.	ND	10.
W-4A-2011	ND	ND	10.
W-4A-2012	ND	ND	10.
W-4A-2013	ND	ND	10.
W-6B-2025	ND	ND	10.
W-6B-2026	23.	ND	10.
W-6B-2027	16.	ND	10.
W-6B-2028	15.	ND	10.
W-07-2040	55.	ND	10.
W-07-2041	69.	ND	10.
W-07-2042	110.	ND	10.
W-07-2043	85.	ND	10.



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J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

ANALYSIS NO.: 803515-003/053 ANALYSES: EPA Method 9060 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 9060 TOTAL ORGANIC CARBON

UNITS: mg/L

ANALYSIS NO.

(SAMPLE ID.)	RESULTS	BLANK	DETECTION LIMIT
W-08-1989	ND	ND	1.
W-08-1990	ND	ND	1.
W-08-1991	1.	ND	1.
W-08-1992	ND	ND	1.
W-4A-2006	ND	ND	1.
W-4A-2007	ND	ND	1.
W-4A-2008	ND	ND	1.
W-4A-2009	ND	ND	1.
W-6B-2021	ND	ND	1.
W-6B-2022	ND	ND	1.
W-6B-2023	ND	ND	1.
W-6B-2024	ND	. ND	1.
W-07-2036	2.2	ND	1.
₩-07-2037	2.	ND	1.
W-07-2038	1.8	ND	1.
W-07-2039	2.1	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-08-1987

ANALYSIS NO.: 803515-001 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene Ethyl Benzene Total Xylenes	ND ND ND ND	ND ND ND ND	0.7 1. 1.



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J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-00-2002

ANALYSIS NO.: 803515-016 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene Ethyl Benzene Total Xylenes	ND ND ND ND	ND ND ND ND	0.7 1. 1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2004

ANALYSIS NO.: 803515-018 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.



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J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-6B-2019

ANALYSIS NO.: 803515-033 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-07-2034

ANALYSIS NO.: 803515-048 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene	ND ND	ND ND	0.7
Ethyl Benzene	ND ND	ND ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-00-2049

ANALYSIS NO.:

803515-063

ANALYSES: EPA Method 602

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-00-2053

ANALYSIS NO.: 803515-065 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene Ethyl Benzene Total Xylenes	ND 67. 78. 1.6	ND ND ND ND	0.7 1. 1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: Trip Blank

ANALYSIS NO.: 803515-067 ANALYSES: EPA Method 602 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene Ethyl Benzene Total Xylenes	ND ND ND ND	ND ND ND ND	0.7 1. 1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-08-1987

ANALYSIS NO.: 803515-001 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	2.8	ND	1.
1,1-Dichloroethane	50.	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	17.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-00-2002

ANALYSIS NO.: 803515-016 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND CONTRACTOR	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-4A-2004

ANALYSIS NO.: 803515-018 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

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COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	2.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	. 1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

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Results are blank subtracted.

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SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-6B-2019

ANALYSIS NO.: 803515-033 ANALYSES: EPA Method 601

DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88 DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	22.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ЙD	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



SOUTHERN CALIFORNIA DIVISION

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-07-2034

ANALYSIS NO.: 803515-048 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	24.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



SOUTHERN CALIFORNIA DIVISION
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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken; Durand

SAMPLE ID: W-00-2049

ANALYSIS NO.: 803515-063 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1
Bromomethane	ND ND	ND	1.
		ND	1.
Vinyl Chloride Chloroethane	ND	ND	1.
	ND ND	ND	1.
Methylene Chloride		2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350 Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: W-00-2053

ANALYSIS NO.: 803515-065 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	40.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES

17100 Pioneer Blvd. Suite 350

Artesia, CA 90701

ATTN: Mr. Ken Durand

SAMPLE ID: Trip Blank

ANALYSIS NO.: 803515-067 ANALYSES: EPA Method 601 DATE SAMPLED: 02/04/88

DATE SAMPLE REC'D: 02/04/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropropene	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
Cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

Results are blank subtracted.



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March 4, 1988

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350 Artesia, CA 90701 ATTN: Ken Durand ANALYSIS NO.: 803419-016 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88 DATE SAMPLE REC'D: 02/03/88

Enclosed with this letter is the amended report on the chemical and physical analyses on the samples from ANALYSIS NO: 803419-016 shown above.

The samples were received by CRL in a chilled state, intact, and with the chain-of-custody record attached.

Please note that ND() means not detected at the detection limit expressed within the parentheses.

REVIEWED AND APPROVED



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March 4, 1988

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350 Artesia, CA 90701 ATTN: Ken Durand

ANALYSIS NO.: 803419-016 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88 DATE SAMPLE REC'D: 02/03/88

Enclosed with this letter is the amended report on the chemical and physical analyses on the samples from ANALYSIS NO: 803419-016 shown above.

The samples were received by CRL in a chilled state, intact, and with the chain-of-custody record attached.

Please note that ND() means not detected at the detection limit expressed within the parentheses.

REVIEWED AND APPROVED



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-03-1918

ANALYSIS NO.: 806001-001 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88 DATE RELOGGED: 02/08/88 DATE ANALYZED: 02/29/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	10.
Bromomethane	ND	ND	10.
Vinyl Chloride	ND	ND	10.
Chloroethane	ND	ND	10.
Methylene Chloride	ND	ND	10.
1,1-Dichloroethene	ND	ND	10.
1,1-Dichloroethane	ND	ND	10.
Trans-1,2-Dichloroethene	ND	ND	10.
Chloroform	ND	ND	10.
1,2-Dichloroethane	36.	ND	10.
1,1,1-Trichloroethane	ND	ND	10.
Carbon Tetrachloride	ND	ND	10.
Trichlorofluoromethane	ND	ND	10.
1,2-Dichloropropane	ND	ND	10.
Trans-1,3-Dichloropropene	ND	ND	10.
Trichloroethene	14.	ND	10.
Dibromochloromethane	ND	ND	10.
1,1,2-Trichloroethane	ND	ND	10.
cis-1,3-Dichloropropene	ND	ND	10.
2-Chloroethyl Vinyl Ether	ND	ND	10.
Bromoform	ND	ND	10.
Tetrachloroethene	ND	ND	10.
1,1,2,2-Tetrachloroethane	ND	ND	10.
Chlorobenzene	ND	ND	10.
Bromodichloromethane	ND	ND	10.
1,2-Dichlorobenzene	ND	ND	10.
1,3-Dichlorobenzene	ND	ND	10.
1,4-Dichlorobenzene	ND	ND	10.



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February 23, 1988

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350 Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 803419-001/072

ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88 PROJECT: 50-1014-3

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: 803419-001/072 shown above.

Seventy two liquid samples were received by CRL in a chilled state, intact, and with the chain-of-custody record attached.

Please note that ND() means not detected at the detection limit expressed within the parentheses.

AND APPROVED



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J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 803419-001/072

ANALYSES: See Attachement DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

PROJECT: 50-1014-3

The following tests were performed on the samples received:

TEST	METHOD	REFERENCE	COMMENTS
Halogenated Volatile Organics (Liquid)	EPA 601	EPA 600 ¹ , 1982	GC/Hall Detector
Aromatic Volatile Organics (Liquid)	EPA 602	EPA 600 ¹ , 1982	GC/PID Detector
pH (Soil)	EPA 9045	SW 846, 1986	pH meter
CAC Metals (Total)	EPA 6010	SW 846, 1986	ICAP/AA
Chromium, Hexavalent	EPA 7196	SW 846, 1986	ICAP/AA
Specific Conductance	EPA 9050	SW 846, 1986	Conductivity meter
Chloride	EPA 300.0	SW 846, 1986	Water Extraction/IC
Nitrate	EPA 300.0	EPA 600 ²	Water Extraction/IC
Total Organic Carbons	EPA 9060	SW 846, 1986	Infrared Detector
Total Organic Halogens	EPA 9020	SW 846, 1986	Carbon Adsorption, Microcoulometric- Titration Detector

¹Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

²Methods for Chemical Analysis of Water and Wastes, 1983.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-00-1898, 1899

ANALYSIS NO.: 803419-001 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

PRODECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	ND	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	- ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without authorization is prohibited.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-00-1898, 1899

ANALYSIS NO.: 803419-001 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene Ethyl Benzene Total Xylenes	ND ND ND ND	ND ND ND ND	0.7 1. 1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-11-1900, 1901

ANALYSIS NO.: 803419-002 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	3.	ND	1.
1,1-Dichloroethene	2.3	ND	1.
1,1-Dichloroethane	2.5	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	21.	ND	1.
1,1,1-Trichloroethane	2.	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	20.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND ·	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without authorization is prohibited.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-11-1900, 1901

ANALYSIS NO.: 803419-002 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	17.	ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

ANALYSIS NO.: 803419-003/063 ANALYSES: EPA Method 9060

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88 DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

TOTAL ORGANIC CARBONS

UNITS: mg/L

SAMPLE ID	RESULTS	BLANK	DETECTION LIMIT
W 11 1000	10 5	MD	0.5
W-11-1902	12.5	ND	0.5
W-11-1903	12.	ND	0.5
W-11-1904	12.	ND	0.5
W-11-1905	12.	ND	0.5
W-03-1921	137.	ND	0.5
W-03-1922	134.	ND	0.5
W-03-1923	134.	ND	0.5
W-03-1924	137.	ND	0.5
W-04-1938	47.	ND	0.5
W-04-1939	46.	ND	0.5
W-04-1940	46.	ND	0.5
W-04-1941	46.	ND	0.5
W-10-1957	7.	ND	0.5
W-10-1958	7.	ND	0.5
W-10 - 1959	7.	ND	0.5
W-10-1960	7.	ND	0.5
W-09-1974	3.	ND	0.5
W-09-1975	3.	ND	0.5
W-09-1976	3.	ND	0.5
W-09-1977	3.	ND	0.5



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 803419-007/067

ANALYSES: EPA Method 9020

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/12/88 SAMPLE TYPE: Liquid PROJECT: 50-1014-3

TOTAL ORGANIC HALOGENS

UNITS: ug/L

SAMPLE ID	RESULTS	BLANK	DETECTION LIMIT
W-11-1906	79.	ND	8.
W-11-1907	71.	ND	8.
W-11-1908	74.	ND	8.
W-11-1909	57.	ND	8.
W-03-1925	91.	ND	8.
W-03-1926	111.	ND	8.
W-03-1927	105.	ND	8.
W-03-1928	106.	ND	8.
W-04-1942	370.	ND	8.
W-04-1943	350.	ND	8.
W-04-1944	380.	ND ·	8.
W-04-1945	360.	ND	8.
W-10-1961	. 56 .	ND	8.
W-10-1962	97.	ND	8.
W-10-1963	36.	ND	8.
W-10-1964	59.	ND	8.
W-09-1978	160.	ND	8.
W-09-1979	160.	ND	8.
W-09-1980	150.	ND	8.
W-09-1981	170.	ND	8.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-11-1910

ANALYSIS NO.: 803419-011 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/05-10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Conductivity (uMHOS/cm)	7.33	N/A	N/A
(EPA 9050)	1440.	N/A	N/A
Chromium Hexavalent			
(EPA 7196)	ND	ND	0.1
Nitrate (EPA 300.0)	9.6	ND	1.
Nitrate as Nitrogen	2.2	ND	0.2
Chloride (EPA 300.0)	86.	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-11-1911

ANALYSIS NO.: 803419-012 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)

7.34

N/A

N/A

N/A

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-11-1912

ANALYSIS NO.: 803419-013 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)

7.34

N/A

Conductivity (EPA 9050)

3500.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-11-1913

ANALYSIS NO.: 803419-014 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

PH (units) (EPA 9045) 7.36 N/A N/A

Conductivity (EPA 9050) 1320. N/A N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-11-1914

ANALYSIS NO.: 803419-015

ANALYSES: Metals

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

METALS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA 6010)	ND	ND	0.02
Copper (EPA 6010)	ND	ND	0.02
Zinc (EPA 6010)	ND	ND	0.02
Chromium Total			
(EPA 6010)	0.04	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-03-1917, 1918

ANALYSIS NO.: 803419-016
ANALYSES: EPA Method 601
DATE SAMPLED: 02/03/88

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	<u>BLANK</u>	DETECTION LIMIT
Chloromethane	ND	ND	250.
Bromomethane	ND	ND	250.
Vinyl Chloride	ND	ND	250.
Chloroethane	ND	ND	250.
Methylene Chloride	ND	ND	250.
1,1-Dichloroethene	ND	ND	250.
1,1-Dichloroethane	ND	ND	250.
Trans-1,2-Dichloroethene	ND	ND	250.
Chloroform	ND	ND	250.
1,2-Dichloroethane	ND	ND	250.
1,1,1-Trichloroethane	680.	ND	250.
Carbon Tetrachloride	ND	ND	250.
Trichlorofluoromethane	ND	ND	250.
1,2-Dichloropropane	ND	ND	250.
Trichloroethene	ND	ND	250.
Dibromochloromethane	ND	ND	250.
1,1,2-Trichloroethane	ND	ND	250.
cis-1,3-Dichloropropene	ND	ND	250.
2-Chloroethyl Vinyl Ether	ND	ND	250.
Bromoform	ND	ND	250.
Tetrachloroethene	ND ,	ND	250.
1,1,2,2-Tetrachloroethane	680.	ND	250.
Chlorobenzene	ND	ND	250.
Bromodichloromethane	ND	ND	250.
1,2-Dichlorobenzene	ND	ND	250.
1,3-Dichlorobenzene	ND	ND	250.
1,4-Dichlorobenzene	ND	ND	250.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-03-1917, 1918

ANALYSIS NO.: 803419-016 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	*DETECTION LIMIT
Benzene Toluene	ND 8500.	ND ND	175. 250.
Ethyl Benzene	8500.	ND	250.
Total Xylenes	23000.	ND	250.

*Elevated detection limits due to sample matrix.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-03-1929

ANALYSIS NO.: 803419-025 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/05-10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Conductivity (uMHOS/cm)	6.74	N/A	N/A
(EPA 9050)	1500.	N/A	N/A
Chromium Hexavalent			
(EPA 7196)	ND	ND	0.1
Nitrate (EPA 300.0)	ND	ND	1.
Nitrate as Nitrogen	ND	ND	0.2
Chloride (EPA 300.0)	190.	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-03-1930

ANALYSIS NO.: 803419-026 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045) 6.76

Conductivity (EPA 9050) 1650.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-03-1931

ANALYSIS NO.: 803419-027 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)
6.80
N/A
Conductivity (EPA 9050)
1500.

N/A
N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-03-1932

ANALYSIS NO.: 803419-028 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

ph (units) (EPA 9045)

Conductivity (EPA 9050)

1650.

RESULTS

N/A

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-03-1933

ANALYSIS NO.: 803419-029

ANALYSES: Metals

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

METALS

UNITS: mg/L

PARAMETERS	RESULTS	<u>BLANK</u>	DETECTION LIMIT
Cadmium (EPA 6010) Copper (EPA 6010) Zinc (EPA 6010) Chromium Total	ND ND ND	ND ND	0.02 0.02 0.02
(EPA 6010)	0.08	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-04-1934, 1935

ANALYSIS NO.: 803419-030 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	*DETECTION LIMIT
Chloromethane	ND	ND	20.
Bromomethane	ND	ND	20.
Vinyl Chloride	ND	ND	20.
Chloroethane	ND	ND	20.
Methylene Chloride	ND	ND	20.
1,1-Dichloroethene	56.	ND	20.
1,1-Dichloroethane	70.	ND	20.
Trans-1,2-Dichloroethene	ND	ND	20.
Chloroform	ND	ЙD	20.
1,2-Dichloroethane	35.	ND	20.
1,1,1-Trichloroethane	24.	ND	20.
Carbon Tetrachloride	ND	ND	20.
Trichlorofluoromethane	ND	ND	20.
1,2-Dichloropropane	ND	ND	20.
Trichloroethene	110.	ND	20.
Dibromochloromethane	ND	ND	20.
1,1,2-Trichloroethane	ND	ND	20.
cis-1,3-Dichloropropene	ND	ND	20.
2-Chloroethyl Vinyl Ether	ND	ND	20.
Bromoform	ND	ND	20.
Tetrachloroethene	ND	ND	20.
1,1,2,2-Tetrachloroethane	ND	ND	20.
Chlorobenzene	ND	ND	20.
Bromodichloromethane	ND	ND	20.
1,2-Dichlorobenzene	ND ·	ND	20.
1,3-Dichlorobenzene	ND	ND	20.
1,4-Dichlorobenzene	ND	ND	20.

^{*}Elevated detection limit due to sample matrix.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-04-1934, 1935

ANALYSIS NO.: 803419-030 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	*DETECTION LIMIT
Benzene	ND	ND	14.
Toluene	180.	ND	20.
Ethyl Benzene	70.	ND	20.
Total Xylenes	200.	ND	20.

*Elevated detection limits due to sample matrix.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-04-1946

ANALYSIS NO.: 803419-039 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/05-10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Conductivity (uMHOS/cm)	6.59	N/A	N/A
(EPA 9050)	4300.	N/A	N/A
Chromium Hexavalent			
(EPA 7196)	140.	ND	0.1
Nitrate (EPA 300.0)	1.1	ND	1.
Nitrate as Nitrogen	0.2	ND	0.2
Chloride (EPA 300.0)	790.	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-04-1947

ANALYSIS NO.: 803419-040 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)
6.60

N/A

Conductivity (EPA 9050)
4200.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-04-1948

ANALYSIS NO.: 803419-041 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

ph (units) (EPA 9045) 6.60

N/A

Conductivity (EPA 9050) 5,000.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-04-1949

ANALYSIS NO.: 803419-042 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045) 6.60

N/A

Conductivity (EPA 9050) 5000.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-04-1950

ANALYSIS NO.: 803419-043

ANALYSES: Metals

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

METALS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA 6010) Copper (EPA 6010) Zinc (EPA 6010) Chromium Total	0.06 ND 0.03	ND ND ND	0.02 0.03 0.02
(EPA 6010)	140.	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-00-1951, 1952

ANALYSIS NO.: 803419-044 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	ND	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-00-1951, 1952

ANALYSIS NO.: 803419-044 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-10-1953, 1954

ANALYSIS NO.: 803419-045 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULT	<u>BLANK</u>	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	ND	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	3.7	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	15.	ND	1.
1,1,1-Trichloroethane	2.3	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	14.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-10-1953, 1954

ANALYSIS NO.: 803419-045 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-10-1965

ANALYSIS NO.: 803419-054 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88 CDATE ANALYZED: 02/05-10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mq/L

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045)	7.50	N/A	N/A
Conductivity (uMHOS/cm)	1400.	N/A	N/A
(EPA 9050) Chromium Hexavalent	1400.	N/A	N/ A
(EPA 7196)	ND	ND	0.1
Nitrate (EPA 300.0)	ND	ND	1.
Nitrate as Nitrogen	ND	ND	0.2
Chloride (EPA 300.0)	100.	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-10-1966

ANALYSIS NO.: 803419-055 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)

7.51

N/A

Conductivity (EPA 9050)

1340.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Alin: Kell Duland

Sample ID: W-10-1967

ANALYSIS NO.: 803419-056 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

PH (units) (EPA 9045)

7.50

N/A

Conductivity (EPA 9050)

1360.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-10-1968

ANALYSIS NO.: 803419-057 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)

7.53

N/A

Conductivity (EPA 9050)

1320.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-10-1969

ANALYSIS NO.: 803419-058

ANALYSES: Metals

DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

METALS

UNITS: mq/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA 6010)	ND	ND	0.02
Copper (EPA 6010)	ND	ND	0.02
Zinc (EPA 6010)	ND	ND	0.02
Chromium Total			
(EPA 6010)	0.08	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-09-1970, 1971

ANALYSIS NO.: 803419-059 ANALYSES: EPA Method 601 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88 SAMPLE TYPE: Liquid

PROJECT: 50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	35.	ND	1.
1,1-Dichloroethene	50.	ND	1.
1,1-Dichloroethane	40.	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	13.	ND	1.
1,2-Dichloroethane	6.	ND	1.
1,1,1-Trichloroethane	2.6	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	17.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND ·	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-09-1970, 1971

ANALYSIS NO.: 803419-059 ANALYSES: EPA Method 602 DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-09-1982

ANALYSIS NO.: 803419-068 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88 DATE ANALYZED: 02/05-10/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS	RESULTS	<u>BLANK</u>	DETECTION LIMIT
pH (units) (EPA 9045) Conductivity (uMHOS/cm)	7.16	N/A	N/A
(EPA 9050)	2000.	N/A	N/A
Chromium Hexavalent			
(EPA 7196)	1.3	ND	0.1
Nitrate (EPA 300.0)	32.	ND	10.
Nitrate as Nitrogen	7.2	ND	0.2
Chloride (EPA 300.0)	290.	ND	10.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-09-1983

ANALYSIS NO.: 803419-069 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

PH (units) (EPA 9045)

7.15

N/A

Conductivity (EPA 9050)

2100.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-09-1984

ANALYSIS NO.: 803419-070 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: 50-1014-3

....

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)

7.15

N/A

Conductivity (EPA 9050)

2150.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-09-1985

ANALYSIS NO.: 803419-071 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88 DATE ANALYZED: 02/05/88

SAMPLE TYPE: Liquid PROJECT: 50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

pH (units) (EPA 9045)

7.15

N/A

Conductivity (EPA 9050)

2050.

N/A

N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

SAMPLE ID: W-09-1986

ANALYSIS NO.: 803419-072 ANALYSES: Miscellaneous DATE SAMPLED: 02/03/88 DATE SAMPLE REC'D:02/03/88 DATE ANALYZED: 3/25/88 SAMPLE TYPE: Liquid

PROJECT: 50~1014-3

METALS

UNITS: mg/L

PARAMETERS		RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA	6010)	ND	ND	0.02
Copper (EPA	6010)	ND	ND	0.02
Zinc (EPA	6010)	ND	ND	0.02
Chromium(EPA	6010)	1.3	ND	0.02
(Total)				



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QA/QC SUMMARY

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

ATTN: Ken Durand

Artesia, CA 90701

ANALYSIS NO.: 803419-001/072

ANALYSES: See Attachment DATE SAMPLED: 02/03/88

DATE SAMPLE REC'D: 02/03/88

PROJECT: 50-1014-3

QA/QC SUMMARY

•					
<u>Date</u>	Matrix	erage Spike overy%	Acceptable Range%	Relative Percent Ac <u>Difference</u>	ceptable <u>Range</u> %
2/10/88	Nitrate (EPA 300.0)	102	87-121	2	10
2/10/88	Chloride (EPA 300.0)	99	90-112	1	10
2/10/88	Total Organic Carbons (EPA 9060)	103	50-130	0	30
2/12/88	Total Organic Halogens (EPA 9020)	107	50-130	2	30
2/05/88	Chromium Hexavalent (EPA 7196)	100	76.4-137	0	26
2/09/88	Cadmium (EPA 6010)	96	74.2-140	6	26
2/09/88	Chromium (EPA 6010)	96	76.4-137	2	26
2/09/88	Copper (EPA 6010)	94	48.1-155	5	18
2/09/88	Zinc (EPA 6010)	86	63.1-149	. 11	36
2/10/88	Toluene (EPA 602)	78	60-120	11	40
2/10/88	Xylenes (EPA 602)	86	60-120	7	40
2/10/88	1,1 Dichloroethene (EPA 601)	90	60-120	24	40
2/10/88	Chlorobenzene (EPA 601)	99	60-120	7	40
2/10/88	Trichloroethene (EPA 601)	92	60-120	33	40



7440 Lincoln Way • Garden Grove, CA 92641 (714) 898-6370 • (213) 598-0458 RECEIVED FEB 2 2 1988 Ans'd....

February 17, 1988

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350 Artesia, CA 90701 ATTN: Ken Durand

ANALYSIS NO.: 803406-001/048 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

PROJECT: #50-1014-3

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: 803406-001/048 shown above.

Forty eight liquid samples were received by CRL in a chilled state, intact, and with the chain-of-custody record attached.

Please note that ND() means not detected at the detection limit expressed within the parentheses.

REVIEWED AND APPROVED



7440 Lincoln Way • Garden Grove, CA 92641 (714) 898-6370 • (213) 598-0458

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand ANALYSIS NO.: 803406-001/048

ANALYSES: See Attachment DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

PROJECT: #50-1014-3

The following tests were performed on the samples received:

<u>TEST</u>	METHOD	REFERENCE	COMMENTS
CAC Metals (Total)	EPA 6010	SW 846, 1986	ICAP/AA
Chromium, Hexavalent	EPA 7196	SW 846, 1986	Spectrophotometer
Halogenated Volatile Organics (Liquid)	EPA 601	EPA 600 ¹ , 1982	GC/Hall Detector
Aromatic Volatile Organic (Liquid)	EPA 602	EPA 600 ¹ , 1982	GC/PID Detector
Chloride	EPA 300.0	SW 846, 1986	Water Extraction/IC
Nitrate	EPA 300.0	EPA 600 ²	Water Extraction/IC
Total Organic Carbon	EPA 9060	SW 846, 1986	Infrared Detector
Total Organic Halogen	EPA 9020	SW 846, 1986	Carbon Adsorption, Microcoulometric- Titration Detector
рН	EPA 9040	SW 846, 1986	Electrometric
Specific Conductance	EPA 9050	SW 846, 1986	Conductivity meter

 $^{^{1}\}mathrm{Methods}$ for Organic Chemical Analysis of Municipal and Industrial Wastewater.

²Methods for Chemical Analysis of Water and Wastes, 1983.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-00-1852

ANALYSIS NO.: 803406-001 ANALYSES: EPA Method 601 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	<u>BLANK</u>	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	1.6	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND ·	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

Note: Result values are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-00-1852

ANALYSIS NO.: 803406-001 ANALYSES: EPA Method 602 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88 DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene Toluene Ethyl Benzene Total Xylenes	ND ND ND ND	ND ND ND ND	0.7 1. 1.
			— ·

Note: Result values are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-01-1854

ANALYSIS NO.: 803406-003 ANALYSES: EPA Method 601 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	<u>BLANK</u>	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	1.6	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	4.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND .	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-01-1854

ANALYSIS NO.: 803406-003 ANALYSES: EPA Method 602 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.

Note: Result values are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 803406-005/038 ANALYSES: EPA Method 9060

DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/04/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

TOTAL ORGANIC CARBONS EPA METHOD 9060

UNITS: mq/L

SAMPLE ID	RESULTS	BLANK	DETECTION LIMIT
W-01-1856	9.	ND	1.0
W-01-1857	10.	ND	1.0
W-01-1858	10.	ND	1.0
W-01-1859	10.	ND	1.0
W-02-1871	ND	ND	1.0
W-02-1872	ND	ND	1.0
W-02-1873	ND	ND	1.0
W-02-1874	ND	ND	1.0
W-05-1886	7.	ND	1.0
W-05-1887	8.	ND	1.0
W-05-1888	7.	ND	1.0
W-05-1889	6.	ND	1.0



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 803406-009/042

ANALYSES: EPA Method 9020 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

TOTAL ORGANIC HALOGEN EPA METHOD 9020

UNITS: mq/L

SAMPLE ID	RESULTS	BLANK	DETECTION LIMIT
W-01-1860	0.08	ND	0.01
W-01-1861	0.06	ND	0.01
W-01-1862	0.2	ND	0.01
W-01-1863	0.08	ND	0.01
W-02-1875	0.04	ND	0.01
W-02-1876	0.05	ND	0.01
W-02-1877	0.03	ND	0.01
W-02-1878	0.04	ND	0.01
W-05-1890	0.04	ND	0.01
W-05-1891	0.3	ND	0.01
W-05-1892	0.3	ND	0.01
W-05-1893	0.3	ND	0.01



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-01-1864

ANALYSIS NO.: 803406-013 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88 DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

PARAMETERS

RESULTS

BLANK

DETECTION LIMIT

PH (units) (EPA 9045)

7.10

N/A

Specific Conductance
(EPA 9050)

2,600.

N/A

N/A

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-01-1865

ANALYSIS NO.: 803406-014 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.11	N/A	N/A
(EPA 9050)	3,000.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-01-1866

ANALYSIS NO.: 803406-015 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.08	N/A	N/A
(EPA 9050)	3,000.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-01-1867

ANALYSIS NO.: 803406-016 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/08-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.13	N/A	N/A
(uMHOS/cm) (EPA 9050)	3,300.	N/A	N/A
Chloride (EPA 300.0)	430.	ND	1.0
Nitrate (EPA 300.0)	19.	ND	1.0
Chromium Hexavalent	ND	ND	0.1
(EPA 7196)			



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-01-1868

ANALYSIS NO.: 803406-017 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA 6010)	ND	ND	0.02
Copper (EPA 6010)	0.04	ND	0.02
Zinc (EPA 6010)	0.04	ND	0.02
Chromium (EPA 6010)	0.08	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

ATTN: Ken Durand

Sample ID: W-02-1869

ANALYSIS NO.: 803406-018 ANALYSES: EPA Method 601 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	1.6	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	5.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND .	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

क्षित्र अन्तरमञ्जूष्ट अस्तर अस्तर अन्तर अवस्थित स्वरूप स<mark>्वत्रीम् स्वर</mark>ूप । असीता स्वरूप अस्तरात



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-02-1869

ANALYSIS NO.: 803406-018 ANALYSES: EPA Method 602 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ИД	1.
Total Xylenes	ND	ND	1.

Note: Result values are blank subtracted.

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-02-1879

ANALYSIS NO.: 803406-028 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88 DATE ANALYZED: 02/08-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.29	N/A	N/A
(uMHOS/cm) (EPA 9050)	1,650.	N/A	N/A
Chloride (EPA 300.0)	110.	ND	1.0
Nitrate (EPA 300.0)	32.	ND	1.0
Chromium Hexavalent			
(EPA 7196)	ND	ND	0.1



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-02-1880

ANALYSIS NO.: 803406-029 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.25	N/A	N/A
(EPA 9050)	1,500.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-02-1881

ANALYSIS NO.: 803406-030 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS	RESULTS	<u>BLANK</u>	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.27	N/A	N/A
(EPA 9050)	1,500.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-02-1882

ANALYSIS NO.: 803406-031 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.29	N/A	N/A
(EPA 9050)	1,550.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-02-1883

ANALYSIS NO.: 803406-032 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA 6010)	ND	ND	0.02
Copper (EPA 6010)	0.04	ND	0.02
Zinc (EPA 6010)	0.03	ND	0.02
Chromium (EPA 6010)	0.05	ND	0.02



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

Sample ID: W-05-1884

ANALYSIS NO.: 803406-033 ANALYSES: EPA Method 601 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	<u>BLANK</u>	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	1.6	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	10.	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	20.	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	5.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND ·	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-05-1884

ANALYSIS NO.: 803406-033 ANALYSES: EPA Method 602 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	ESULTS BLANK	
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.

Note: Result values are blank subtracted.

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

- - -- -- --

Sample ID: W-05-1894

ANALYSIS NO.: 803406-043 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88
DATE ANALYZED: 02/05-10/88

SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.14	N/A	N/A
(uMHOS/cm) (EPA 9050)	1,550.	N/A	N/A
Nitrate (EPA 300.0)	22.	ND	1.0
Chloride (EPA 300.0)	90.	ND	1.0
Chromium Hexavalent	ND	ND	0.1
(EPA 7196)			



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-05-1895

ANALYSIS NO.: 803406-044 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.04	N/A	N/A
(EPA 9050)	1,500.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-05-1896

ANALYSIS NO.: 803406-045 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.06	N/A	N/A
(EPA 9050)	1,550.	N/A	N/A



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-05-1897

ANALYSIS NO.: 803406-046 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/05/88 SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: uMHOS/cm

<u>PARAMETERS</u>	RESULTS	BLANK	DETECTION LIMIT
pH (units) (EPA 9045) Specific Conductance	7.02	N/A	N/A
(EPA 9050)	1,550.	N/A	N/A

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: W-05-1898

ANALYSIS NO.: 803406-047 ANALYSES: Miscellaneous DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/09/88 SAMPLE TYPE: Liquid PROJECT: #50-1014-3

MISCELLANEOUS PARAMETERS

UNITS: mg/L

PARAMETERS	RESULTS	BLANK	DETECTION LIMIT
Cadmium (EPA 6010)	ND	ND	0.02
Copper (EPA 6010)	ND	ND	0.02
Zinc (EPA 6010)	0.40	ND	0.02
Chromium (EPA 6010)	0.10	ND	0.02

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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: Trip Blank

ANALYSIS NO.: 803406-048 ANALYSES: EPA Method 601 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMIT
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	ND	1.6	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	ND	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ИD	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trichloroethene	ND	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethyl Vinyl Ether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND ·	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

Note: Result values are blank subtracted.



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LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand

Sample ID: Trip Blank

ANALYSIS NO.: 803406-048 ANALYSES: EPA Method 602 DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

DATE ANALYZED: 02/08/88 SAMPLE TYPE: Liquid

PROJECT: #50-1014-3

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: uq/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Toluene	ND	ND	1.
Ethyl Benzene	ND	ND	1.
Total Xylenes	ND	ND	1.

Note: Result values are blank subtracted.

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QA/QC SUMMARY

J.H. KLEINFELDER & ASSOCIATES 17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand ANALYSIS NO.: 803406-001/048

ANALYSES: See Attachment DATE SAMPLED: 02/02/88

DATE SAMPLE REC'D: 02/03/88

PROJECT: #50-1014-3

QA/QC SUMMARY

<u>Date</u>	Matr	verage ix Spike covery%	Acceptable Range%	Relative Percent <u>Difference</u>	Acceptable Range%
2/10/88	Nitrate (EPA 300.0)	102	87-121	2	10
2/10/88	Chloride (EPA 300.0)	99	90-112	1	10
2/08/88	Total Organic Halogen (EPA 9020)	112	50-130	6.8	30
2/04/88	Total Organic Carbon (EPA 9060)	99.93	50-130	1	30
2/04/88	Chromium Hexavalent (EPA 7196)	105	76.4-137	5	26
2/09/88	Cadmium (EPA 6010)	96	74.2-140	6	26
2/09/88	Copper (EPA 6010)	94	48.1-155	5	18
2/09/88	Chromium (EPA 6010	96	76.4-137	2	26
2/09/88	Zinc (EPA 6010)	86	63.1-149	11	36
2/08/88	Toluene (EPA 602)	91	60-120	16	40
2/08/88	Xylenes (EPA 602)	83	60-120	10	40
2/08/88	1,1 Dichloroethene (EPA 601)	103	60-120	3	40
2/08/88	Chlorobenzene (EPA 601)	106	60-120	5	40

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May 24, 1988

KLEINFELDER
17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand ANALYSIS NO.: 812618-001/012 ANALYSES: EPA Method 7190 DATE SAMPLED: 05/03-05/88 DATE SAMPLE REC'D: 05/05/88

PROJECT: 50-1015-04

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: 812618-001/012 shown above.

Twelve liquid samples were received by CRL in a chilled state, intact, and with the chain-of-custody record attached.

Please note that ND() means not detected at the detection limit expressed within the parentheses.

elina Angles REVIEWED

APPROVED



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KLEINFELDER

17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 812618-001/012

ANALYSES: EPA Method 7190 DATE SAMPLED: 05/03-05/88 DATE SAMPLE REC'D: 05/05/88

PROJECT: 50-1015-04

The following test was performed on the samples received:

TEST

METHOD

REFERENCE

COMMENTS

Chromium, Total

EPA 7190

SW 946, 1986

AA, Direct Aspiration



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LABORATORY REPORT

KLEINFELDER

17100 Pioneer Blvd., Suite 350

Artesia, CA 90701

ATTN: Ken Durand

ANALYSIS NO.: 812618-001/012

ANALYSES: EPA Method 7190

DATE SAMPLED: 05/03-05/88

DATE SAMPLE REC'D: 05/05/88

DATE ANALYZED: 05/12/88

SAMPLE TYPE: Liquid PROJECT: 50-1015-04

TOTAL CHROMIUM BY EPA METHOD 7190

UNITS: mg/L

SAMPLE ID	RESULTS	BLANK	DETECTION LIMIT
W-MW1-2055	ND	ND	0.02
W-MW5-2056	ND	ND	0.02
W-MW4 4 −2057	238.	ND	2.0
W-MW4#2058	0.02	ND	0.02
W-MW10-2059	0.05	ND	0.02
W-MW7-2060	ND	ИD	0.02
W-MW11-2061	ND	ND	0.02
W-MW9-2062	2.42	ND	0.02
W-MW6B-2063	ND	ИD	0.02
W-MW8-2064	ND	ИД	0.02
W-MW2-2065	ND	ND	0.02
W-MW3-2066	ND	ND	0.02



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LABORATORY REPORT

KLEINFELDER
17100 Pioneer Blvd., Suite 350

Artesia, CA 90701 ATTN: Ken Durand ANALYSIS NO.: 812618-001/012 ANALYSES: EPA Method 7190 DATE SAMPLED: 05/03-05/88 DATE SAMPLE REC'D: 05/05/88

PROJECT: 50-1015-04

QA/QC SUMMARY

<u>Date</u>	Matr	Average rix Spike ecovery%	Acceptable Range%	Relative Percent Difference	Acceptable Range%
05/12/88	Chromium (EPA 7190)	115	47.3-159	0	47

APPENDIX C

Chain of Custody Forms

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CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) IM TURNER 860 Phone: _ Shipper Klein foldo SHIP TO: Address ______ATOSIT Date Shipped 2/3/88 Carden Grune Shipment Service _____C Airbill No. _____ ATTENTION: _____ Cooler No. Phone No. Relinquished by: (Signature) Received by: (Signature) Date/Time TIM TURVER Relinquished by: (Signature) Received by: (Signature, Date/Time Relinquished by: (Signature) Received by: (Signature Date/Time Relinquished by: (Signature) Receive for laboratory by*: Date/Time 4:50 *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA/90701 Date Analysis Site Sample Condition Sample Identification Sampled Requested Upon Receipt Number 50-1014-3 1922 1923 1974 1925 10X LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: summary of analytical methodology and QA work (blanks, spikes, duplicates) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

White - Kleinfelder

CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) Shipper Kloinfeldi SHIP TO: Date Shipped _____ Shipment Service Airbill No. _ ATTENTION: ___ Cooler No. Phone No. Received by: (Signature) Date/Time Relinquished by; (Signature) Received by: (Signature) 'Date/Time Relinguished by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) Receive for laboratory by *: (Sign Relinquished by: (Signature) *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA 907/01 Site Date Analysis Sample Condition Sample Requested Upon Receipt Sampled Number Identification 700

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

- (1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
- (2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
- (3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

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CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) Munit Phone: Shipper <u>Kleinfolder</u> SHIP TO: Address Agles 1/2 Date Shipped _____ Conder Grove Shipment Service _______ Airbill No. _ ATTENTION: ___ Cooler No. Phone No. Received by: (Signature) Relinquished by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) Date/Time Receive for laboratory by : (Signature) Date/Time Relinquished by: (Signature) 4:50/4 *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA 90701 Date Sample Site Analysis Sample Condition Identification Sampled Requested Upon Receipt Number 7C X TOX TOX TOX NGJ CL, HX Cr LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: summary of analytical methodology and QA work (blanks, spikes, duplicates) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis (2)

(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

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CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) TURNER Shipper Klein felds SHIP TO: Date Shipped 2/3/85 CARDO Crove Airbill No. _ ATTENTION: Cooler No. _ Phone No. Relinquished by: (Signature) Received by: (Signature) Date/Time Tim Turner Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signatule) Date/Time Relinquished by: (Signature) Receive for laboratory by * (signature) Date/Time Jack 4:50 Pm *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA 90701 Site Date Sample Condition Analysis Sample Number Identification Sampled Requested Upon Receipt EM 602 70C TUC TOL グロメ TOX TOX 1981 pit, con J, NOZ, Cl, Her Cr 1987 1993 1984 Cu, Zn, Cr PoTU 1986 LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: summary of analytical methodology and QA work (blanks, spikes, duplicates) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

White - Kleinfelder

Canary - Laboratory Courtesy Copy

Pink - Sampler

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CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) SHIP TO: Date Shipped 3/4/45 Shipment Service _____ Airbill No. ATTENTION: Celans Cooler No. Phone No. Relinquished by: (Signature) Date/Time Received by (Signature) Relinquished by: (81gnature) Date/Time Date/Time Relinquished by: (Signafure) Received by: (Signature) Relinquished by: (Signature) Receive for laboratory by*: (Signature) Date/Time 2/4/88 6:45 *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA 90701 Sample Site Date Analysis Sample Condition Sampled Requested Upon Receipt Number Identification 47-1014-3 2001 W-00-2002 XXX 3 101 2003 2006 70C 2008 TOC 2010 2011 2012 2013 LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: summary of analytical methodology and QA work (blanks, spikes, duplicates) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

White - Kleinfelder

Canary - Laboratory Courtesy Copy

Pink - Sampler

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20/8 W-63-20/9 2020 2021 2022 TCC 2023 TCC 2024 TCC 2026 70X AB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: (1) summary of analytical methodology and QA work (blanks, spikes, duplicates)	_					
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White - Kleinfelder

CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) Shipper __ Kleinstelder SHIP TO: Address Astesia Shipment Service _____ Airbill No. _ ATTENTION: Carling Cooler No. _____ Phone No. Relinquished by: (Signature) Relinquished by Signature Received by: (Signature) Date/Time Received by: (Signature) Date/Time Relinquished by: (Signature) Date/Time Receive for laboratory by *: (Signature) Relinquished by: (Signature) *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA 90701 Site Date Analysis Sample Condition Sample Identification Sampled Requested Upon Receipt Number May Ch, How Co 41-613-2029 EPA GUI W-07-2034 DU 35 7031 2339 2040 70> 2041 2042 TOX LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: summary of analytical methodology and QA work (blanks, spikes, duplicates) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated (4)

White - Kleinfelder

Canary - Laboratory Courtesy Copy

Pink - Sampler

CHAIN OF CUSTODY RECORD SHIPPING INFORMATION SAMPLERS: (Signature) Phone: Shipper Kleinfaldr SHIP TO: Address Artesia Gruce Shipment Service ____ Airbill No. ATTENTION: __ Cooler No. _ Phone No. Received by (Signatu Date/Time, Relinquished by: (Signature 2 Received by: (Signature) Date/Time Relinquished by (Signat) Received by: (Signature) Date/Time Relinquished by: (Signature, Date/Time Receive for laboratory by *: (Signature) Relinquished by: (Signature) 6:45 *Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to KLEINFELDER, 17100 Pioneer Blvd., Suite 350, Artesia, CA 90701 Sample Condition Date Site **Analysis** Sample Sampled Requested **Upon Receipt** Identification Number NOZ, CC, (x(Hex) 8,602 LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following: summary of analytical methodology and QA work (blanks, spikes, duplicates) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis detection limits for all constituents analyzed for and reporting of all constituents detected which were not

specifically designated

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W. MW4. 2058	50-1015-04	5-4-88					
W. MW10.2059	50 1015-04	5-4-88					
W.MW7.2060	50.1015 -04	5-4-88					
W. MW11.2061	50.1015.04	5-4-88	_				
W-MW68-2							
W.MW9- 2062	50.1015.04	5-5-88					
W.MW6B-2063	50.1015 .04	5-5.88					
W. MW8 - 2064	50,1015.04	5-588					
W-MW2-2065	30.1015-04	5 5.48	_	1			
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